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THE TARIFF HISTORY

OF THE

UNITED STATES

A SERIES OF ESSAYS

BY

F. W. TAUSSIG, LL.B., PH.D.

PROFESSOR OF POLITICAL ECONOMY IN HARVARD UNIVERSITY

FOURTH EDITION

REVISED, WITH ADDITIONAL MATERIAL

G. P. PUTNAM'S SONS

NEW YORK
27 WEST TWENTY-THIRD STREET

LONDON
24 BEDFORD STREET, STRAND

The Knickerbocker Press

1899

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1753
T28
1899

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by
G. P. PUTNAM'S SONS

The Knickerbocker Press, New Rochelle, N. Y.

NOTE TO THE FIRST EDITION.

OF the papers printed in this volume none is now presented to the public for the first time. The essay on "Protection to Young Industries as Applied in the United States" was first published in Cambridge in 1882, and was republished in a revised edition in New York in 1883. The paper on "The Tariff of 1828" appeared in the *Political Science Quarterly* for March, 1888. That on "The History of the Tariff between 1830 and 1860" was printed in the *Quarterly Journal of Economics* for April, 1888. "The History of the Present Tariff" was published in New York in 1885. All, however, have been revised for the present volume, and considerable additions have been made. I have avoided repetitions, so far as this was possible, and have attempted to connect the narrative of the separate parts. Although not originally written with the design of presenting a complete history of our tariff legislation, these papers cover in some sort the entire period from 1789 to 1887.

F. W. T.

CAMBRIDGE, MASS., July, 1888.

6/23/69

NOTE TO THE FOURTH EDITION.

FOR the second and third editions (published in 1892 and 1896) the history was brought to date by adding chapters on the tariff acts of 1890 and 1894. It is now again enlarged, in this fourth edition, by a chapter on the act of 1897. In preparing these chapters, I have made free use of articles contributed from time to time to the *Quarterly Journal of Economics*, the *Political Science Quarterly*, and the *Economic Journal*. Other parts of the volume, and more particularly those dealing with the period 1861–1883, have been revised and rewritten; and some changes and additions have been made in the tables in the Appendix.

CAMBRIDGE, MASS, March, 1898.

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THE TARIFF HISTORY OF THE UNITED STATES.

PROTECTION TO YOUNG INDUSTRIES AS APPLIED IN THE UNITED STATES.

I.

THE ARGUMENT FOR PROTECTION TO YOUNG INDUSTRIES.

OF the arguments in favor of protection, none has been more frequently or more sincerely urged than that which is expressed in the phrase "protection to young industries." None has received so generally the approval of economists, even of those little disposed to acknowledge the validity of any reasoning not in accordance with the theory of free exchange. Mill gave it the weight of his approval in a passage which has been frequently cited. Later English writers have followed him in granting its intrinsic soundness. The reasoning of List, the most prominent protectionist writer among the Germans, is based, so far as it is purely economic, on this argument, and since List's time the argument has taken an established place in German treatises on political economy, even though it be admitted that the conditions to which it fairly applies belong to the past.

The argument is, in brief, that it may be advantageous to encourage by legislation a branch of industry which might be profitably carried on, which is therefore sure to be carried on eventually, but whose rise is prevented for the time being by artificial or accidental causes. The essential point of the argument lies in the assumption that the causes which prevent the rise of the industry, and render protection necessary, are not natural and permanent causes,—not such as would permanently prevent, under a state of freedom, the growth of the industry. Let it be supposed, for instance, that the industry to be encouraged is the cotton manufacture. The natural advantages of a given country for making cotton cloths are good, we may suppose, in comparison with the advantages for producing other things. The raw material is cheap, power for machinery is abundant, the general intelligence and industry of the people—which, since they admit of but very slow change, must be considered natural advantages—are such as to fit them for complex industrial operations. There is no permanent cause why cotton goods should not be obtained at as low cost by making them at home as by importing them; perhaps they can even be produced at lower cost at home. But the cotton manufacture, let it be further supposed, is new; the machinery used is unknown and complicated, and requires skill and experience of a kind not attainable in other branches of production. The industry of the country runs by custom in other grooves, from which it

is not easily diverted. If, at the same time, the communication of knowledge be slow, and enterprise be hesitating, we have a set of conditions under which the establishment of the cotton manufacture may be prevented, long after it might have been carried on with advantage. Under such circumstances it may be wise to encourage the manufacture by duties on imported goods, or by other analogous measures. Sooner or later the cotton manufacture will be introduced and carried on, even without assistance; and the government's aid will only cause it to be established with less friction, and at an earlier date, than would otherwise have been the case.

It may illustrate more clearly the conditions under which such assistance may be useful, to point out those under which it is superfluous. The mere fact that an industry is young in years—has been undertaken only within a short period of time—does not supply the conditions under which protection is justified by this argument. An industry recently established, but similar in kind to other branches of production already carried on in the country, would hardly come within its scope. But where the industry is not only new, but forms a departure from the usual track of production; where, perhaps, machinery of an entirely strange character, or processes hitherto unknown, are necessary; where the skill and experience required are such as could not be attained in the occupations already in vogue; under these circumstances protection may be applied with good results, if no natural

disadvantages, in addition to the artificial obstacles, stand in the way. The manufacture of linen goods in the United States, at the present time, probably supplies an example of an industry which, though comparatively new, can hardly be said to deserve protection as a young industry. The methods and machinery in use are not essentially different from those of other branches of textile manufactures. No great departure from the usual track of production is necessary in order to make linens. Manufacturers of the same general character are established on all sides. Work-people and managers with experience in similar work can be easily found. Moreover, the means of obtaining and communicating knowledge at the present time are such that information in regard to the methods and machinery of other countries can be easily obtained, while workmen can be brought from abroad without difficulty. Those artificial obstacles which might temporarily prevent the rise of the industry do not exist, and it may be inferred that, if there are no permanent causes which prevent linens from being made as cheaply in the United States as in other countries, the manufacture will be undertaken and carried on without needing any stimulus from protecting duties.

There are two sets of conditions under which it is supposable that advantages not natural or inherent may be found in one country as compared with another, under which causes merely temporary and accidental may prevent the rise of certain branches of industry in the second

country, and under which, therefore, there may be room for the application of protection. These are, first, the state of things in a new country which is rapidly growing in population, and in which, as population becomes more dense, there is a natural change from exclusive devotion to the extractive industries toward greater attention to those branches of production classed as manufactures. The transition from a purely agricultural state to a more diversified system of industry may be retarded, in the complete absence of other occupations than agriculture, beyond the time when it might advantageously take place. Secondly, when great improvements take place in some of the arts of production, it is possible that the new process may be retained in the country in which they originate, and may fail to be applied in another country, through ignorance, the inertia of habit, and perhaps in consequence of restrictive legislation at the seat of the new methods. Here, again, the obstacles to the introduction of the new industry may be of that artificial kind which can be overcome most easily by artificial means. Now, both these sets of conditions seem to have been fulfilled in the United States in the beginning of the present century. The country was normally emerging, to a considerable extent, from that state of almost exclusive devotion to agriculture which had characterized the colonies. At the same time great changes were taking place in the mechanical arts, and new processes, hardly known outside of England, and held under a practical monopoly

there, were revolutionizing the methods of manufacturing production. Under these circumstances there would seem to have existed room for the legitimate application of protection for young industries.

The more detailed examination in the following pages of the industrial condition of the country during the earlier part of this century will bring out more clearly the reasons why protection may then have been useful. It may be well, however, to notice at this point one difference between those days and the present which must seriously affect the application of the argument we are considering. Even if we were to suppose the conditions of 1810 to exist now; if the country were now first beginning to attempt manufactures, and if a great revolution in manufacturing industry happened to make the attempt peculiarly difficult; even then the obstacles arising from the force of custom, and from the want of familiarity with new processes, would be much more easy to overcome now than sixty years ago. The ties of custom in industry have become much loosened in the last half century; capital and labor turn more easily to new employments. The railroad, the telegraph, the printing-press, the immense increase in the facility of communication, the constant change in methods of production in all industries, have tended to make new discoveries and inventions common property, and to do away with advantages in production based on other than permanent causes. It is true that there are still appreciable differences in the arts of pro-

duction in different countries, and that some may have a superiority over others based on the merely accidental or temporary possession of better processes or more effective machinery. But the United States hardly lag behind in the industrial advance of the present day, and where they do labor under artificial or factitious disadvantages, these cannot endure long or be of great consequence under a system of freedom.

Sixty years ago, however, the state of things was very different. The conditions were then in force under which protection might be needed to enable useful industries to be carried on. The argument for protection to young industries was accordingly the most effective of those urged in favor of the protective policy. During the twenty years which followed the war of 1812 the protective controversy was one of the most important features in the political life of the nation; and the young industries argument was the great rallying-cry of the protectionists. It is of interest to examine how far protection of the kind advocated was actually applied, and how far it was the cause, or an essential condition, of that rise of manufactures which took place. The object of this paper is to make such an investigation.

II.

THE INDUSTRIAL HISTORY OF THE UNITED STATES, AND THE COURSE OF PROTECTIVE LEGISLATION, FROM 1789 TO 1838.

THE early economic history of the United States may be divided into two periods. The first, which is in the main a continuation of the colonial period, lasted till about the year 1808; the embargo marks the beginning of the series of events which closed it. The second began in 1808, and lasted through the generation following. It was during the second period that the most decided attempt was made to apply protection to young industries in the United States, and with this period we are chiefly concerned.

During the first period the country was, on the whole, in the same industrial condition in which the colonies had been. The colonies had been necessarily engaged almost exclusively in agriculture, and in the occupations closely connected with it. The agricultural community could not get on without blacksmiths, carpenters, masons, shoemakers, and other artisans, and these existed side by side with the farmers. In those days, it must be remembered,

handicraft workmen of this kind occupied a more important place in industrial organizations than they do at the present time. They made many articles and performed many services which are now the objects of manufacturing production and of extensive trade, and come within the range of international dealings. Many tools were then made by individual blacksmiths, many wares by the carpenter, many homespun cloths fulled and finished at the small fulling-mill. Production of this kind necessarily takes place at the locality where consumption goes on. In those days the division of labor between distant bodies of men had been carried out to a comparatively slight extent, and the scope of international trade was therefore much more limited. The existence of these handicraft workmen accounts for the numerous notices of "manufactures" which Mr. Bishop industriously collected in his "History of Manufactures," and is not inconsistent with the mainly extractive character of the industry of the colonies. What could be imported at that time was imported, and was paid for by the exportation of agricultural produce. The exportation took place, so far as the northern colonies were concerned, largely to the West Indies. From the West India trade the means for paying indirectly for the imported goods were mainly obtained. There were some important exceptions to this general state of things. Ship-building was carried on to a considerable extent in New England, where abundance of material and the necessity of transportation by water

made such an industry natural. The production of unmanufactured iron was carried on to a considerable extent; for at that time the production of pig and bar iron tended to fix itself in those countries where wood, the fuel then used, was abundant, and was therefore an industry much more analogous to agriculture than it has been since the employment of coal as fuel. In the main, however, the colonies made only such manufactures as could not be imported. All manufactured goods that could be imported were not made at home, but obtained in exchange for agricultural exports.

This state of things was little changed after the end of the Revolutionary war and the adoption of the Constitution. The year 1789 marks no such epoch in economic as it does in political history. Agriculture, commerce, and the necessary mechanic arts, continued to form the main occupations of the people. Such goods as could be imported continued to be obtained from abroad in exchange for exports, mainly of agricultural produce. The range of importable articles was, it is true, gradually extending. Cloths, linens, and textile fabrics were still chiefly homespun, and fine goods of this kind were still in the main the only textile fabrics imported. But with the great growth of manufacturing industry in England during this time, the range of articles that could be imported was growing wider and wider. During the Napoleonic wars the American market was much the most important for the newly established English manufactures. Large quanti-

ties of cotton and woollen goods were imported, and the importations of manufactures of iron, in regard to which a similar change in production was then taking place, also increased steadily. Sooner or later the change in the course of production which was going on in England must have had, and did have, a strong influence on the economic condition of the United States; but for the time being this influence was little felt, and the country continued in the main to run in the grooves of the colonial period.

This absence of development was strongly promoted by the peculiar condition of the foreign trade of the country up to 1808. The wars of the French Revolution opened to this country profitable markets for its agricultural products in the West Indies and in Europe, and profitable employment for its shipping, both in carrying the increased exports and in a more or less authorized trade between the belligerent countries and their colonies. For many years the gains arising from these sources, though not regular or undisturbed, were great, and afforded every inducement to remain in the occupations that yielded them. The demand for agricultural products for exportation to the belligerent countries and their colonies was large, and the prices of wheat, corn, and meat were correspondingly high. The heavy exports and the profits on freights furnished abundant means for paying for imported goods. Importations were therefore large, and imported goods were so cheap as to afford little induce-

ment for engaging in the production of similar goods at home.[1]

The tariff legislation of this period was naturally much influenced by the direction taken by the industries of the

[1] The following tables of imports and exports show the influence of these circumstances on the foreign trade of the country. The exports of foreign produce show the swelling of the carrying-trade. The price of flour shows the effect on the prices of agricultural produce. The influence of the temporary stoppage of the war in Europe during the time of the Peace of Amiens is clearly seen.

Year.	*Gross Imports.* 000 Omitted.	*Gross Exports.* 000 Omitted.	*Exports of Foreign Produce.* 000 Omitted	*Price of Flour per Bbl.*
1791	29,200	19,000	500	. . .
92	31,500	20,700	1,750	$ 5.07
93	31,100	26,100	2,100	6.21
94	34,600	33,000	6,500	7.22
95	69,750	48,000	8,500	12.05
96	81,400	67,000	26,300	12.43
97	75,400	56,800	27,000	9.00
98	68,500	61,500	33,000	8.78
99	79,000	78,600	45,500	9.62
1800	91,200	71,000	39,100	9.85
01	111,300	94,000	46,600	10.45
Peace of Amiens. 02	76,300	72,000	35,700	6.75
Peace of Amiens. 03	64,700	55,800	13,600	6.73
04	85,000	77,700	36,200	8.22
05	120,600	95,500	53,200	10.28
06	129,400	101,500	60,300	7.30
07	138,500	108,300	59,600	7.00
08	57,000	22,400	13,000	5.60
09	59,400	52,200	20,800	6.90
10	85,400	66,700	24,400	9.66
11	53,400	61,300	16,000	10.00
12	77,000	38,500	8,500	8.75
13	22,000	27,900	2,800	8.50
14	13,000	6,900	150	7.70

The tables of imports and exports are from the Treasury Reports. The last table, giving the price of flour, is in "American State Papers, Finance," III., 536.

country. The peculiarly favorable conditions under which agriculture and commerce were carried on prevented the growth of any strong feeling in favor of assisting manufactures. Much has been said in the course of the protective controversy about the views of the fathers of the republic. But for nearly twenty years after the formation of the Union other subjects so absorbed the attention of public men that no distinct opinion appears in their utterances for or against protective duties. Considering the state of economic knowledge in those days, the example set by European countries, and the application of the colonial system before the days of independence, we cannot be surprised that some disposition was shown to impose protective duties. It is curious that in the first session of Congress these were advocated most earnestly by the representatives from Pennsylvania, who took their stand from the first as unflinching advocates of a protective policy. On the other hand, the current toward more liberal views, which had set in so strongly after the writings of the French economists and the publication of the "Wealth of Nations," had made its way to the United States. One might expect to find its influence most strong among the followers of Jefferson, whose political philosophy led them in general to oppose government interference. But both Federalists and Republicans were influenced in their attitude to the question of protection most of all by its bearing on the other more prominent questions on which parties began to be divided.

Madison had maintained the principle of free intercourse in 1789,[1] and Jefferson in 1787 had extolled the virtues of a simple agricultural State.[2] But in 1793, when the Federalists and Republicans began to differ on questions of foreign policy, and especially on the attitude the country should take in the wars of the French Revolution, Jefferson advocated vigorous measures of protection directed against England, and Madison brought forward a set of resolutions based on his recommendations.[3] On the other hand, Fisher Ames had said, in 1789, that the general government should nurture those industries in which the individual States had an interest; but in 1794, when his political views led him to oppose Madison's resolutions, he called the whole theory of protection an exploded dogma.[4] It has often been said that the first tariff act, that of 1789, was a protective measure, and that in the debate on it the protective controversy appeared full-grown. But such considerations had little to do with the act; and the discussions on protection by no means indicate what was the real centre of interest.[5] The act was modelled on the five per cent. import duty, which the

[1] "Annals of Congress," 1789, pp. 112–114.

[2] "Notes on Virginia, Works," VIII., 404.

[3] See Jefferson's "Report on Commerce, Works," VII., 637; and Madison's resolutions of 1794, based on Jefferson's Report, "Annals of Congress," 1794, pp. 155, 209.

[4] "Annals of Congress," 1789, p. 221; 1794, p. 342.

[5] It is significant, for example, that Madison's letters to Jefferson, then in Paris, about the debates on the tariff act of 1789, make no reference whatever to the protective discussion. Madison's "Works," I., 466, 480.

Congress of the Confederation had tried in vain to impose, and its main object was to secure revenue for the new government, whose successful working was the one end which all the legislation of the first few years sought to bring about. The general level of duties was five per cent. on the value. On certain articles of luxury, higher ad valorem rates were fixed, the highest being fifteen per cent. on carriages. In certain specific duties, on articles like hemp, cordage, nails, iron manufactures, and glass, there was doubtless an intention of aiding the domestic producers.[1] Some of these articles were selected because it was supposed they would be needed in time of war. On others it is not unlikely that a concession to protective demands was made by those who had at heart the success of the new government, in order to insure the passage of the indispensable revenue act.[2]

The same general state of feeling and the same policy continued during the twenty years following. For a short time after 1789, it may be possible to detect a drift in favor of protective duties,[3] which doubtless was strength-

[1] It seems to have been understood that the duties on these articles were made specific with this intention. See a brief report by Hamilton in his "Works," II., 55.

[2] This suggestion is made in Professor H. C. Adams's essay on "Taxation in the United States," 1789–1816, in the "Johns Hopkins University Studies," vol. II., pp. 29, 30. The reader who wishes further information is referred to this excellent monograph.

[3] A number of committee reports on petitions for higher duties are printed in "American State Papers, Finance," vols. I., II. After 1794 the reports are generally against the petitions.

ened by the powerful advocacy of protection in Hamilton's "Report on Manufactures" (1792). But that famous document had little, if any, effect on legislation. The moderate policy of 1789 was maintained. The duties were increased from time to time as more revenue was needed, but they were in all cases moderate. Those which were most distinctly protective aimed to assist industries which already had a good foothold, and they had no appreciable influence in diverting the industry of the country into new channels. No action at all was taken for the encouragement of the production of textiles, of crude iron, and of the other articles which later became the great subjects of dispute in the protective controversy.

The industrial situation changed abruptly in 1808. The complications with England and France led to a series of measures which mark a turning-point in the industrial history of the country. The Berlin and Milan decrees of Napoleon, and the English orders in Council, led, in December, 1807, to the Embargo. The Non-Intercourse Act followed in 1809. War with England was declared in 1812. During the war, intercourse with England was prohibited, and all import duties were doubled. The last-mentioned measure was adopted in the hope of increasing the revenue, but had little effect, for foreign trade practically ceased to exist. This series of restrictive measures blocked the accustomed channels of exchange and production, and gave an enormous stimulus to those branches of industry whose products

had before been imported. Establishments for the manufacture of cotton goods, woollen cloths, iron, glass, pottery, and other articles, sprang up with a mushroom growth. We shall have occasion to refer more in detail to this growth when the history of some of these manufactures comes to be considered separately. It is sufficient here to note that the restrictive legislation of 1808–15 was, for the time being, equivalent to extreme protection. The consequent rise of a considerable class of manufacturers, whose success depended largely on the continuance of protection, formed the basis of a strong movement for more decided limitation of foreign competition.

Some signs of the gradual growth of a protective feeling appear before the close of the war.[1] It was natural that the patriotic fervor which the events of the period of restriction and war called out for the first time in our history, should bring with it a disposition to encourage the production at home of a number of manufactured articles, of which the sudden interruption in the foreign supply caused great inconvenience. Madison, whose views on this subject, as on others, shifted as time went on and circumstances changed, recommended the encouragement of manufactures; and in some of Clay's earlier speeches we can see the first signs of the American system of the

[1] It is curious to note that in 1802–1804, during the temporary lull that followed the Peace of Amiens, the committee reports seem to show a drift toward protection. See "American State Papers, Finance," II., pp. 29, 80, and the report on the Barbary Powers Act of 1804, "Annals of Congress," 1804, pp. 946–950.

future.[1] The feeling in favor of the manufactures that had sprung up during the time of restriction obtained some clear concessions in the tariff act of 1816. The control of the policy of Congress at that time was in the hands of a knot of young men of the rising generation, who had brought about the war and felt in a measure responsible for its results. There was a strong feeling among these that the manufacturing establishments which had grown up during the war should be assisted. There was little feeling, however, either in Congress or among the people, such as appeared in later years, in favor of a permanent strong protective policy. Higher duties were therefore granted on those goods in whose production most interest was felt, textile fabrics; but only for a limited period. Cotton and woollen goods were to pay 25 per cent. till 1819; after that date they were to pay 20 per cent. A proviso, intended to make more secure this measure of protection, was adopted in regard to a minimum duty on cotton goods, to which reference will be made in another connection. These and some other distinctly protective provisions were defended by Calhoun, mainly on the ground of the need of making provision for the exigencies of another war; and on that ground they were adopted. and at the same time limited. The general increase of

[1] See Madison's message of 1809, "Statesman's Manual," I., 289; and Clay's speech of 1810, "Works," I., 195. Madison never gave up his general acceptance of the principle of free trade, but admitted it to be inapplicable to articles needed in time of war, and in circumstances to which the young-industries' argument applied. See his "Works," III., 42.

duties under the act of 1816, to an average of about twenty per cent., was due to the necessity of providing for the payment of the interest on the heavy debt contracted during the war.

For some time after the close of the war and the enactment of the tariff of 1816, there was no pressure for a more vigorous application of protective principles. The general expectation was, that the country would fall back into much the same state of things as that which had existed before 1808; that agriculture and commerce would again be as profitable as during the previous period, and would be as exclusively the occupations of the people. Such an expectation could not in the nature of things be entirely fulfilled, but for a time it was encouraged by several accidental circumstances. The harvests in Europe for several seasons were bad, and caused a stronger demand and higher price for the staple food products. The demand for cotton was large, and the price high. Most important of all, the currency was in a state of complete disarrangement, and concealed and supported an unsound economic condition. Under cover of the excessive issues of practically irredeemable bank-notes, the prices of all commodities were high, as were the general rates of wages and rents. The prices of bread-stuffs and provisions, the staples of the North, and of cotton and tobacco, the staples of the South, were high, not only absolutely, but relatively, and encouraged continued large production of these articles. The prices of most manufactured

goods were comparatively low. After the war the imports of these from England were very heavy. The long pent-up stream of English merchandise may be said to have flooded the world at the close of the Napoleonic wars. In this country, as in others, imports were carried beyond the capacity for consumption, and prices fell much below the normal rates. The strain of this over-supply and fall of prices bore hard on the domestic manufacturers, especially on those who had begun and carried on operations during the restrictive period; and many of them were compelled to cease production and to abandon their works.

This abnormal period, which had its counterpart of feverish excitement and speculation in Europe, came to an end in 1818–19. The civilized world then settled down to recover slowly from the effects of a generation of war and destruction. In the United States the currency bubble was pricked in the latter part of 1818. Prices began to fall rapidly and heavily, and continued to fall through 1819. The prices of the agricultural staples of the North and South underwent the greatest change, for the harvests in Europe were again good in 1818, the English corn-laws of 1816 went into operation, and the demand for cotton fell off. A new scale of monetary exchange gradually went into operation. During the period of transition there was, as there always is in such periods, much suffering and uneasiness; but gradually the difficulties of adjusting old contracts and engagements were overcome, and the habits of the people accommodated

themselves to the new régime. Within three or four years after 1819 the effects of the crash were no longer felt in most parts of the country.

Two results which it is important to note in this connection followed from the crisis of 1819: first, a great alteration in the position and prospects of manufacturing industries; and second, the rise of a strong public feeling in favor of protecting these industries, and the final enactment of legislation for that purpose. The first of these results was due primarily to the fact that the fall in prices after 1819 did not so greatly affect most manufactured goods as it did other articles. The prices of manufactured goods had already declined, in consequence of the heavy importations in the years immediately following the war. When, therefore, the heavy fall took place in 1819 in the prices of food and of raw materials, in the gains of agriculture, in money wages and money rents, the general result was advantageous for the manufacturers. They were put into a position to produce with profit at the lower prices which had before been unprofitable, and to meet more easily foreign competition. After the first shock was over, and the system of exchange became cleared of the confusion and temporary stoppage which must attend all great fluctuations in prices, this result was plainly felt.[1] It is easy to see that the whole process

[1] "The abundance of capital, indicated by the avidity with which loans are taken at the reduced rate of five per cent., the reduction in the wages of labor, and the decline in the price of property of all kinds, all concur favorably for domestic manufactures."—Clay, Speech of 1820. "Works," I., 419.

was nothing more than the evolution of the new state of things which was to take the place of that of the period before 1808. In that earlier period manufactured goods, so far as they could be obtained by importation at all, were imported cheaply and easily by means of large exports and freight earnings. These resources were now largely cut off. Exports declined, and imports in the end had to follow them. The tightening of the English corn-law, and the general restriction of trade and navigation by England and other countries, contributed to strengthen this tendency, and necessarily served to stimulate the growth of manufactures in the United States. That growth was indeed complicated and made more striking by the revolution which was then taking place in many departments of manufacturing industry. Especially in the production of textile fabrics, machinery was rapidly displacing—in England had already largely displaced—production by hand on a small scale. Home-spun textiles were gradually making room for the products of the spinning-jenny and the power-loom. The state of things that followed the crisis of 1818–19 was favorable to the rise of manufactures; but the change took place not so much by an increase in the relative number of persons engaged in such occupations, as in the substitution of manufactures in the modern sense for the more simple methods of the previous period.[1]

[1] According to the census returns of 1820 and 1840, the only two of the earlier returns in which occupations are enumerated, there were engaged

The second effect of the change that followed the financial crisis of 1819, was the strong protective movement which exercised so important an influence on the political history of the next generation. The diminution of the foreign demand, and the fall in the prices of staple products, naturally gave rise to a cry for a home market. The absence of reciprocity and the restrictive regulations of England, especially in face of the comparatively liberal import duties of this country, furnished an effective argument to the advocates of protection. Most effective, however, was the argument for protection to young industries, which was urged with persistency during the next ten or

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in manufactures and the mechanic arts in 1820, 13.7 per cent. of the working population; in 1840, 17.1 per cent. In New England 21 per cent. were so engaged in 1820, 30.2 per cent. in 1840; in the Middle States 22.6 per cent. in 1820, 28 per cent. in 1840. Mac Gregor, "Progress of America," II., 101. There are no census figures before 1820. In 1807 it was loosely estimated that out of 2,358,000 persons actively employed, 230,000 were engaged in mechanics and manufactures—less than 10 per cent. Blodgett, "Thoughts on a Plan of Economy," etc. [1807] p. 6.

The fluctuations in the exports of wheat flour, which was the most important article of export among agricultural products during the early part of the century, tell plainly the story of the country's foreign trade. They were as follows, the figures indicating millions of dollars:

Yearly average,	1803–7 (expanded trade)	8.2
" "	1808–10 (restriction)	4.0
" "	1810–12 (restrictions removed) . . .	13.5
" "	1813–15 (war)	5.5
" "	1816–17 (temporary revival) . . .	14.5
Year	1818	6.0
"	1819	5.0
"	1820	4.3

During the decade 1820–1830, when matters settled down to a normal state, the yearly export was between four and five millions of dollars. See "Quarterly Reports of the Bureau of Statistics," 1883–84, No. 4, pp. 523, 524.

fifteen years. The character and history of this early protective movement will be discussed elsewhere.[1] Here it is sufficient to note that its effect on legislation was not merely to maintain the protective provisions of the tariff of 1816, but much to extend the protective element in tariff legislation. Already in 1818 it had been enacted that the duty of 25 per cent. on cottons and woollens should remain in force till 1826, instead of being reduced to 20 per cent. in 1819, as had been provided by the act of 1816. At the same time the duty on all forms of unmanufactured iron was considerably raised; a measure to which we shall have occasion to refer in another connection. In 1820, while the first pressure of the economic revulsion bore hard on the people, a vigorous attempt was made to pass a high protective tariff, and it barely failed of success, by a single vote in the Senate. In 1824 the protectionists succeeded in passing the tariff of that year, which increased all duties considerably. Four years later, in the tariff of 1828, the protective movement reached its highest point. The measures which followed in 1832 and 1833 moderated the peculiarly offensive provisions of the act of 1828, but retained the essential parts of protection for some years longer. On the whole, from 1816 on, there was applied for some twenty years a continuous policy of protection; for the first eight years with much moderation, but after 1824 with high duties, and stringent measures for enforcing them.

[1] In the next essay, pp. 68–75.

III.

THE COTTON MANUFACTURE.

We turn now to the history of some of the industries to which protection was applied during this long period, in order to determine, so far as this is possible, how far their introduction and early growth were promoted or rendered possible by protection. We shall try to see how far and with what success protection to young industries was applied. The most important of them, on account both of its magnitude and of the peculiarly direct application of protection to it, is the cotton manufacture; and we are fortunate in having, at the same time, the fullest and most trustworthy accounts of the early history of this industry.[1]

During the first of the two periods into which we have divided the early economic history of the United States, several attempts were made to introduce the manufacture of cotton by the machinery invented by Hargreaves and Arkwright in the latter part of the 18th century. One or

[1] In S. Batchelder's "Introduction and Early Progress of the Cotton Manufacture in the U. S." (1863); G. S. White's "Memoir of Samuel Slater" (1836); and N. Appleton's "Introduction of the Power-loom and Origin of Lowell" (1858).

two of these attempts succeeded, but most of them failed, and the manufacture, which then was growing with marvellous rapidity in England, failed to attain any considerable development in this country. In 1787 a factory using the new machinery was established at Beverly, Mass., and obtained aid from the State treasury; but it was soon abandoned. Similar unsuccessful ventures were made at Bridgewater, Mass., Norwich, Conn., and Pawtucket, R. I., as well as in Philadelphia. The spinning-jenny was introduced in all these, but never successfully operated.[1] The first successful attempt to manufacture with the new machinery was made by Samuel Slater, at Pawtucket, R. I. Slater was a workman who had been employed in Arkwright's factories in England. He joined to mechanical skill strong business capacity. He had become familiar with the system of carding, drawing, roving, and mule-spinning. Induced to come to the United States in 1798 by prizes offered by the Philadelphia Society for Promoting Manufactures, he took charge in the following year of a cotton-factory which had been begun and carried on with little success by some Quakers of Pawtucket. He was successful in setting up the Arkwright machinery, and became the founder of the cotton manufacture in this country. Through him machinery, and instruction in using it, were obtainable; and a few other factories were begun under

[1] Batchelder, p. 26 *seq.*; White, ch. III. The cotton-mill at Norwich, built in 1790, was operated for ten years, and then abandoned as unprofitable.—Caulkins, "Hist. of Norwich," p. 696.

his superintendence. Nevertheless, the manufacture hardly maintained its hold. In 1803 there were only four factories in the country.[1] The cotton manufacture was at that time extending in England at a rapid rate, and the imports of cotton goods from England were large. The Treasury reports of those days give no separate statements of the imports of cotton goods; but in 1807 it was estimated that the imports of cotton goods from England amounted to eleven million dollars' worth—a very large sum for those days.[2] The consumption of cotton goods was large; but only an insignificant part of it was supplied by home production, although later developments showed that this branch of industry could be carried on with distinct success. The ease with which these imports were paid for, and the stimulus which this period, as described in the preceding pages, gave to agriculture and commerce, account in part for the slowness with which the domestic manufacture developed. The fact that raw cotton was not yet grown to any considerable extent in the country, together, doubtless, with the better machinery and larger experience and skill of the English, account for the rest.

When, however, the period of restriction began, in 1808, the importation of foreign goods was first impeded, and soon entirely prevented. The domestic manufacture accordingly extended with prodigious rapidity. Already

[1] Bishop, "Hist. of Manufactures," II., 102.

[2] See the pamphlet by Blodgett "On a Plan of Economy," etc., already cited, p. 26.

during the years 1804–8 greater activity must have prevailed; for in the latter year fifteen mills had been built, running 8,000 spindles. In 1809 the number of mills built shot up to 62, with 31,000 spindles, and while 25 more mills were in course of erection.[1] In 1812 there were 50 factories within thirty miles of Providence, operating nearly 60,000 spindles, and capable of operating 100,000.[2] During the war the same rapid growth continued, rendered possible as it was by the increasing supply of raw cotton from the South. The number of spindles was said to be 80,000 in 1811, and 500,000 in 1815. In 1800, 500 bales of cotton had been used; in 1805, 1,000 bales. In 1810 the number consumed rose to 10,000; in 1815, it was 90,000.[3] These figures cannot be supposed to be

[1] Gallatin's Report on Manufactures in 1810; "Amer. State Papers, Finance," II., 427.

[2] " White: " Memoir of Slater," p. 188.

[3] See the Report of a Committee of Congress on the Cotton Manufacture in 1816; "Amer. State Papers, Finance," III, 82, 84. This estimate refers only to the cotton consumed in factories, and does not include that used in household manufacture. The number of spindles for 1815, as given in this report, is probably much too large. In Woodbury's Report of 1836 on cotton, the number of spindles in use in factories is given as follows:

In 1805	. .	4,500 spindles.
" 1807	. .	8,000 "
" 1809	. .	31,000 "
" 1810	. .	87,000 "
" 1815	. .	130,000 "
" 1820	. .	220,000 "
" 1821	. .	230,000 "
" 1825	. .	800,000 "

Exec. Doc.," 1 Sess., 24 Congr., No. 146, p. 51. It need not be said that these figures are hopelessly loose; but they are sufficient to support the general assertions of the text.

at all accurate; but they indicate clearly an enormously rapid development of the manufacture of cotton.

The machinery in almost all these new factories was for spinning yarn only. Weaving was still carried on by the hand-loom, usually by weavers working in considerable numbers on account for manufacturers. Toward the end of the war, however, a change began to be made almost as important in the history of textile manufactures as the use of the spinning-jenny and mule: namely, the substitution of the power-loom for the hand-loom. The introduction of the power-loom took place in England at about the same time, and some intimation of its use seems to have reached the inventor in this country, Francis C. Lowell. He perfected the machine, however, without any use of English models, in the course of the year 1814. In the same year it was put in operation at a factory at Waltham, Mass. There for the first time the entire process of converting cotton into cloth took place under one roof. The last important step in giving textile manufactures their present form was thus taken.[1]

When peace was made in 1815, and imports began again, the newly established factories, most of which were badly equipped and loosely managed, met with serious embarrassment. Many were entirely abandoned. The manufacturers petitioned Congress for assistance; and they received, in 1816, that measure of help which the public was then disposed to grant. The tariff of 1816

[1] Appleton, pp. 7–11; Batchelder, pp. 60–70.

levied a duty of 25 per cent. on cotton goods for three years, a duty considered sufficiently protective in those days of inexperience in protective legislation. At the same time it was provided that all cotton cloths, costing less than 25 cents a yard, should be considered to have cost 25 cents and be charged with duty accordingly; that is, should be charged 25 per cent. of 25 cents, or $6\frac{1}{4}$ cents a yard, whatever their real value or cost. This was the first of the minimum valuation provisos which played so considerable a part in later tariff legislation, and which have been maintained in large part to the present time. A similar minimum duty was imposed on cotton-yarns.[1] At the time when these measures were passed, the minimum provisos hardly served to increase appreciably the weight of the duty of 25 per cent. Coarse cotton cloths were then worth from 25 to 30 cents, and, even without the provisos, would have paid little, if any thing, less than the minimum duty. But, after 1818, the use of the power-loom, and the fall in the price of raw cotton, combined greatly to reduce the prices of cotton goods. The price of coarse cottons fell to 19 cents in 1819, 13 cents in 1826, and $8\frac{1}{2}$ cents in 1829.[2] The minimum duty became proportionately heavier as the price decreased, and, in a few years after its enactment, had become prohibitive of the importation of the coarser kinds of cotton cloths.

[1] The minimum system seems to have been suggested by Lowell. Appleton, p. 13. Compare Appleton's speech in Congress in 1833.—"Congressional Debates," IX., 1213.

[2] Appleton, p. 16.

During the years immediately after the war, the aid given in the tariff of 1816 was not sufficient to prevent severe depression in the cotton manufacture. Reference has already been made to the disadvantages which, under the circumstances of the years 1815–18, existed for all manufacturers who had to meet competition from abroad. But when the crisis of 1818–19 had brought about a rearrangement of prices more advantageous for manufacturers, matters began to mend. The minimum duty became more effective in handicapping foreign competitors. At the same time the power-loom was generally introduced. Looms made after an English model were introduced in the factories of Rhode Island, the first going into operation in 1817; while in Massachusetts and New Hampshire the loom invented by Lowell was generally adopted after 1816.[1] From these various causes the manufacture soon became profitable. There is abundant evidence to show that shortly after the crisis the cotton manufacture had fully recovered from the depression that followed the war.[2] The profits made were such as to cause a rapid

[1] Appleton, p. 13; Batchelder, pp. 70–73.

[2] The following passage, referring to the general revival of manufactures, may be quoted: "The manufacture of cotton now yields a moderate profit to those who conduct the business with the requisite skill and economy. The extensive factories at Pawtucket are still in operation. . . . In Philadelphia it is said that about 4,000 looms have been put in operation within the last six months, which are chiefly engaged in making cotton goods, and that in all probability they will, within six months more, be increased to four times that number. In Paterson, N. J., where, two years ago, only three out of sixteen of its extensive factories were in operation . . . all are now in vigorous employment."—"Niles's Register," XXI., 39 (1821). Com-

extension of the industry. The beginning of those manufacturing villages which now form the characteristic economic feature of New England falls in this period. Nashua was founded in 1823. Fall River, which had grown into some importance during the war of 1814, grew rapidly from 1820 to 1830.[1] By far the most important and the best known of the new ventures in cotton manufacturing was the foundation of the town of Lowell, which was undertaken by the same persons who had been engaged in the establishment of the first power-loom factory at Waltham. The new town was named after the inventor of the power-loom. The scheme of utilizing the falls of the Merrimac, at the point where Lowell now stands, had been suggested as early as 1821, and in the following year the Merrimac Manufacturing Company was incorporated. In 1823 manufacturing began, and was profitable from the beginning; and in 1824 the future growth of Lowell was clearly foreseen.[2]

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pare *Ibid.*, XXII., 225, 250 (1822); XXIII., 35, 88 (1823); and *passim*. In Woodbury's cotton report, cited above, it is said (p. 57) that "there was a great increase [in cotton manufacturing] in 1806 and 1807; again during the war of 1812; again from 1820 to 1825; and in 1831–32."

[1] Fox's "History of Dunstable"; Earl's "History of Fall River," p. 20 *seq.*

[2] See the account in Appleton, pp. 17–25. One of the originators of the enterprise said in 1824: "If our business succeeds, as we have reason to expect, we shall have here [at Lowell] as large a population in twenty years from this time as there was in Boston twenty years ago."—Batchelder, p. 69.

In Bishop, II., 309, is a list of the manufacturing villages of 1826, in which some twenty places are enumerated.

From this sketch of the early history of the cotton manufacture we may draw some conclusions. Before 1808 the difficulties in the way of the introduction of this branch of industry were such that it made little progress. These difficulties were largely artificial; and though the obstacles arising from ignorance of the new processes and from the absence of experienced workmen, were partly removed by the appearance of Slater, they were sufficient, when combined with the stimulus which the condition of foreign trade gave to agriculture and the carrying trade, to prevent any appreciable development. Had this period come to an end without any accompanying political change—had there been no embargo, no non-intercourse act, and no war with England—the growth of the cotton manufacture, however certain to have taken place in the end, might have been subject to much friction and loss. Conjecture as to what might have been is dangerous, especially in economic history, but it seems reasonable to suppose that if the period before 1808 had come to an end without a jar, the eager competition of well-established English manufacturers, the lack of familiarity with the processes, and the long-continued habit, especially in New England, of almost exclusive attention to agriculture, commerce, and the carrying trade, might have rendered slow and difficult the change, however inevitable it may have been, to greater attention to manufactures. Under such circumstances there might have been room for the legitimate application of protection to the cotton manu-

facture as a young industry. But this period, in fact, came to an end with a violent shock, which threw industry out of its accustomed grooves, and caused the striking growth of the cotton manufacture from 1808 to 1815. The transition caused much suffering, but it took place sharply and quickly. The interruption of trade was equivalent to a rude but vigorous application of protection, which did its work thoroughly. When peace came, in 1815, it found a large number of persons and a great amount of capital engaged in the cotton manufacture, and the new processes of manufacture introduced on an extensive scale. Under such circumstances the industry was certain to be maintained if it was for the economic interest of the country that it should be carried on.

The duties of the tariff of 1816, therefore, can hardly be said to have been necessary. Nevertheless, they may have been of service. The assistance they gave was, it is true, insignificant in comparison with the shelter from all foreign competition during the war. Indeed, most manufacturers desired much higher duties than were granted.[1] It is true, also, that the minimum duty on cottons was least effective during the years immediately after the war, when the price of cottons was higher, and the duty was therefore proportionately less high. But these years be-

[1] "In 1816 a new tariff was to be made. The Rhode Island manufacturers were clamorous for a very high specific duty. Mr. Lowell's views on the tariff were much more moderate, and he finally brought Mr. Lowndes and Mr. Calhoun to support the minimum of 6¼ cents a yard, which was carried."—Appleton, p. 13.

tween the close of the war and the general fall of prices in 1819 were trying for the manufacturers. The normal economic state, more favorable for them, was not reached till the crisis of 1818–19 was well over. During the intervening years the minimum duty may have assisted the manufacturers without causing any permanent charge on the people. The fact that careful and self-reliant men, like the founders of the Waltham and Lowell enterprises, were most urgent in advising the adoption of the rates of 1816—at a time, too, when the practice of appealing to Congress for assistance when in distress had not yet become common among manufacturers—may indicate that those rates were of service in encouraging the continuance of the manufacture. How seriously its progress would have been impeded or retarded by the absence of duties, cannot be said. On the whole, although the great impulse to the industry was given during the war, the duties on cottons in the tariff of 1816 may be considered a judicious application of the principle of protection to young industries.

Before 1824, the manufacture, as we have seen, was securely established. The further application of protection in that and in the following years was needless, and, so far as it had any effect, was harmful. The minimum valuation was raised in 1824 to 30 cents, and in 1828 to 35 cents. The minimum duties were thereby raised to $7\frac{1}{2}$ and $8\frac{3}{4}$ cents respectively. By 1824 the manufacture had so firm a hold that its further extension should have been

left to individual enterprise, which by that time might have been relied on to carry the industry as far as it was for the economic interest of the country that it should be carried. The increased duties of 1824 and 1828 do not come within the scope of the present discussion.

IV.

THE WOOLLEN MANUFACTURE.

THE sudden and striking growth of the cotton manufacture in the last hundred years has caused its history, in this country as in others, to be written with comparative fulness. Of the early history of the manufacture of woollen goods in the United States we have but scanty accounts ; but these are sufficient to show that the general course of events was similar to that in cotton manufacturing. During the colonial period and the years immediately after the Revolution, such woollen cloths as were not spun and woven in households for personal use were imported from England. The goods of household manufacture, however, formed, and for many years after the introduction of machinery continued to form, by far the greater part of those in use. The first attempt at making woollens in large quantities is said to have been made at Ipswich, Mass., in 1792 ; but no machinery seems to have been used in this undertaking. In 1794 the new machinery was for the first time applied to the manufacture of wool, and it is noteworthy that, as in the case of the cotton manufacture, the machinery was introduced by En-

lish workmen. These were the brothers Arthur and John Scholfield, who came to the United States in 1793, and in the next year established a factory at Byfield, Mass. Their machinery, however, was exclusively for carding wool, and for dressing (fulling) woollen goods; and for the latter purpose it was probably in no way different from that of the numerous fulling-mills which were scattered over the country during colonial times. Spinning and weaving were done, as before, on the spinning-wheel and the hand-loom. The Scholfields introduced carding-machinery in place of the hand-cards, and seem to have carried on their business in several places with success. A Scotchman, James Saunderson, who emigrated in 1794, also introduced carding-machines at New Ipswich, N. H., in 1801. Their example, however, was followed by few. Carding-machines were introduced in a few other places between 1800 and 1808; but no development of the business of systematically making cloth, or preparing wool for sale, took place. The application of machinery for spinning does not seem to have been made at all.[1] One great difficulty in the way of the woollen manufacture was the deficient supply and poor quality of wool. The means of overcoming this were supplied when in 1802 a large flock of fine merino sheep was imported from Spain,

[1] See a sketch of the early history of the woollen manufacture in Taft's "Notes on the Introduction of the Woollen Manufacture." Compare the same writer's account in "Bulletin National Ass. of Wool Manufacturers," II., 478-488 and the scattered notices in Bishop, "Hist. of Manufactures," I., 421, and II., 106, 109, 118, etc.

followed in 1809 and 1810 by several thousand pure merinos from the same country.[1] But imports from England continued to be large, and those woollen cloths that were not homespun were obtained almost exclusively from the mother country.[2]

When the period of restriction began in 1808, the woollen manufacture received, like all other industries in the same position, a powerful stimulus. The prices of broadcloth, then the chief cloth worn besides homespun, rose enormously, as did those of flannels, blankets, and other goods, which had previously been obtained almost exclusively by importation. We have no such detailed statements as are given of the rise of the cotton manufacture. It is clear, however, that the manufacture of woollen goods, which had had no real existence before, began, and was considerably extended. The spinning of wool by

[1] Bishop, II., 94, 134.

[2] The United States were important customers of woollens for England, as appears from the following figures, which give in millions of pounds sterling the total exports of woollens from England, and those of exports to the United States.

	Total	To the U. S.
1790	5.2	1.5
1791	5.5	1.6
1792	5.5	1.4
1793	3.8	1.0
1794	4.4	1.4
1795	5.2	2.0
1796	6.0	2.3
1797	4.9	1.9
1798	6.5	2.4
1799	6.9	2.8

Brothers, "Wool and Wool Manufactures of Great Britain," 143, 144

machinery was introduced, and goods were made for sale on a large scale. As early as 1810 the carding and spinning of wool by machinery was begun in some of the cotton mills in Rhode Island.[1] In Northampton, Mass., Oriskany, N. Y., and other places, large establishments for the manufacture of woollen goods and of satinets (mixed cotton and woollen goods) sprang up. The value of woollen goods made in factories is said to have risen from $4,000,000 in 1810 to $19,000,000 in 1815.[2]

After 1815 the makers of woollens naturally encountered great difficulties in face of the renewed and heavy importations of English goods. The tariff of 1816 gave them the same duty that was levied on cottons, 25 per cent., to be reduced in three years to 20 per cent. The reduction of the duty to 20 per cent., which was to have taken place in 1819, was then postponed, and in the end never took place. No minimum valuation was fixed for woollen goods; hence there was not, as for cotton goods, a minimum duty. Wool was admitted at a duty of 15 per cent. The scheme of duties, under the tariff of 1816, thus afforded no very vigorous protection. Nor did the provisions of the act of 1824 materially improve the position of the woollen manufacturers. The duty on woollen goods was in that act raised to 30 per cent. in the first instance, and to 33⅓ per cent. after 1825. At the same time the

[1] Gallatin's report of 1810, "Am. State Papers, Finance," II. 427; Taft, 44.

[2] "Bulletin Wool Manufacturers," II., 486. This is hardly more than a loose, though significant, guess.

duty on wool (except that costing ten cents a pound or less) was raised to 20 per cent. in the first place, to 25 per cent. after 1825, and to 30 per cent. after 1826. If foreign wool had to be imported to supplement the domestic supply,—and such a necessity has constantly existed in this country since 1816,—the increased price of wool in this country, as compared with other countries which admitted wool free or at a lower duty, would tend to make the effectual protection to woollen manufacturers far from excessive.

Notwithstanding the very moderate encouragement given from 1816 to 1828, the woollen manufacture steadily progressed after the crisis of 1819, and in 1828 was securely established. During the years from the close of the war till 1819 much embarrassment was felt, and many establishments were given up; but others tided over this trying time.[1] After 1819 the industry gradually responded to the more favorable influences which then set in for manufactures, and made good progress. During 1821 and 1822 large investments were made in factories for making woollen cloths, especially in New England.[2] In 1823 the manufacturers of woollens in Boston were sufficiently numerous to form an independent

[1] Thus a large factory in Northampton, built in 1809 (Bishop, II., 136), was still in operation in 1828 ("Am. State Papers, Finance," V., 815). In Taft's "Notes" there is mention (pp. 39–40) of the Peacedale Manufacturing Company, which began in 1804, and has lasted to the present time. It is said that the spinning-jenny was first applied to wool in this factory.

[2] Bishop, II., 270, 294; Niles, XXII., 225.

organization for the promotion of their interests, which were, in that case, to secure higher protective duties.[1] The best evidence which we have of the condition of the industry during these years is to be found in the testimony given in 1828 by various woollen manufacturers before the Committee of the House of Representatives on Manufactures. This testimony shows clearly that the industry was established in 1828 on such a scale that the difficulties arising from lack of skill and experience, unfamiliarity with machinery and methods, and other such temporary obstacles, no longer had influence in preventing its growth.[2] The capital invested by the thirteen manufacturers who testified before this committee varied from $20,000 to $200,000, the average being $85,000. The quantity of wool used by each averaged about 62,000 pounds per year. These figures indicate a scale of operation very considerable for those days. Six of the factories referred to had been established between 1809 and 1815. With the possible exception of one, in regard to which the date of foundation was not stated, none had been established in the years between 1815 and 1820; the remaining six had been built after 1820. Spinning-machinery was in use in all. Some used power-looms, others hand-looms. The application of the power-loom to weaving woollens, said one manufacturer, had been made in the United States

[1] Niles, XXV., 148, 189,

[2] The testimony is printed in full in "American State Papers, Finance," V., 792–832.

earlier than in England.[1] An indication, similar to this, of the point reached by the American producers in the use of machinery, was afforded by the difference of opinion in regard to the comparative merits of the jenny, and of the "Brewster," a spinning-machine of recent invention. Goods of various kinds were made—broadcloths, cassimeres, flannels, satinets, and kerseys. The opinion was expressed by several that the mere cost of manufacturing was not greater in the United States than in England; that the American manufacturer could produce, at as low prices as the English, if he could obtain his wool at as low prices as his foreign competitor.[2] This testi-

[1] Testimony, p. 824. The same statement is made by Bishop, II., 317. In Taft's "Notes," p. 39, there is an account of the application of the power-loom to weaving saddle-girths as early as 1814. In 1822 the power-loom for weaving broadcloths seems to have been in common use.—Taft, p. 43.

[2] "Broadcloths are now (1828) made at much less expense of labor and capital than in 1825, by the introduction of a variety of improved and labor-saving machinery, amongst which may be named the dressing-machine and the broad power-loom of American invention" (p. 824). The power-loom was very generally used. "Since the power-looms have been put in operation, the weaving costs ten cents per yard, instead of from eighteen to twenty-eight cents" (p. 814). Shepherd, of Northampton, to whose factory reference has already been made (*ante* p. 44, note 1), said: "The difference in price of cloths (in the United States and in England) would be the difference in the price of the wool, as, in my opinion, we can manufacture as cheap as they (the English) can" (p. 816). In the same connection another manufacturer said: "The woollen manufacture is not yet fairly established in this country, but I know no reason why we cannot manufacture as well and as cheap as they can in England, except the difference in the price of labor, for which, in my opinion, we are fully compensated by other advantages. Our difficulties are not the cost of manufacturing, but the great fluctuations in the home market, caused by the excessive and irreg-

mony seems to show conclusively that at the time when it was given the woollen manufacture had reached that point at which it might be left to sustain itself; at which accidental or artificial obstacles no longer stood in the way of its growth. That many of the manufacturers themselves wanted higher duties, is, for obvious reasons, not inconsistent with this conclusion. Progress had been less certain and rapid than in the case of the kindred cotton manufacture, for the conditions of production were less distinctly favorable. The displacement of the household products by those of the factory was necessarily a gradual process, and made the advance of the woollen manufacture normally more slow than that of the kindred industry. But the growth of the cotton manufacture, so similar to that of wool, of itself removed many of the obstacles arising from the recent origin of the latter. The use of machinery became common, and, when the first great steps had been taken, was transferred with comparative ease from one branch of textile production to another. In 1828, when for the first time heavy protection was given by a complicated system of minimum duties, and when the actual rates rose, in some cases, to over 100 per cent., this aid was no longer needed to sus-

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ular foreign importations. The high prices we pay for labor are, in my opinion, beneficial to the American manufacturer, as for those wages we get a much better selection of hands, and those capable and willing to perform a much greater amount of labor in a given time. The American manufacturer also uses a larger share of labor-saving machinery than the English" (p. 829).

tain the woollen manufacture. The period of youth had then been past.

It appears that direct protective legislation had even less influence in promoting the introduction and early growth of the woollen than of the cotton manufacture. The events of the period of restriction, from 1808 to 1815, led to the first introduction of the industry, and gave it the first strong impulse. Those events may indeed be considered to have been equivalent to effective, though crude and wasteful, protective legislation, and it may be that their effect, as compared with the absence of growth before 1808, shows that protection in some form was needed to stimulate the early growth of the woollen manufacture. But, by 1815, the work of establishing the manufacture had been done. The moderate duties of the period from 1816 to 1828, partly neutralized by the duties on wool, may have something to sustain it; but the position gained in 1815 would hardly have been lost in the absence of these duties. By 1828, when strong protection was first given, a secure position had certainly been reached.

V.

THE IRON MANUFACTURE.

WE turn now to the early history of the iron manufacture,—the production of crude iron, pig and bar. We shall examine here the production, not of the finished article, but of the raw material. It is true that the production of crude iron takes place under somewhat different conditions from those which affect cotton and woollen goods. The production of pig-iron is more in the nature of an extractive industry, and, under ordinary circumstances, is subject in some degree to the law of diminishing returns. To commodities produced under the conditions of that law, the argument for protection to young industries has not been supposed, at least by its more moderate advocates, to apply, since the sites where production will be carried on to best advantage are apt to be determined by unalterable physical causes.[1] It happens, however, that changes in the processes of production, analogous to those which took place in the textile industries, were made at about the same time in the manufacture of crude

[1] See, for instance, List, "System of National Economy," Phila., 1856, pp. 296–300.

iron. These changes rendered more possible the successful application of the principle of protection to young industries, and make the discussion of its application more pertinent. There is another reason why we should consider, in this connection, the raw material rather than the finished article. The production of the latter, of the tools and implements made of iron, has not, in general, needed protection in this country, nor has protection often been asked for it. The various industries by which crude iron is worked into tools and consumable articles were firmly established already in the colonial period, and since then have maintained themselves with little difficulty. The controversy on the protection of the iron manufacture has been confined mainly to the production of pig- and bar-iron. It is to this, therefore, that we shall direct our attention. The production of pig- and bar-iron will be meant when, in the following pages, the "iron manufacture" is spoken of.

During the eighteenth century England was a country importing, and not, as she is now, one exporting, crude iron. The production of pig- and bar-iron was accordingly encouraged in her colonies, and production was carried on in them to an extent considerable for those days. Large quantities of bar-iron were exported from the American colonies to England.[1] The manufacture of iron was

[1] See the tables in Bishop, I., 629, and Scrivenor, "History of the Iron Trade," p. 81. In 1740 the total quantity of iron produced in England was about 17,000 tons; at that time from 2,000 to 3,000 tons annually were regularly imported from the American colonies.

firmly established in the colonies according to the methods common at the time. During the second half of the eighteenth century, however, the great change took place in England in the production of iron which has placed that country in its present position among iron-making countries, and has exercised so important an influence on the material progress of our time. Up to that time charcoal had been used exclusively for smelting iron, and the iron manufacture had tended to fix itself in countries where wood was abundant, like Norway, Sweden, Russia, and the American colonies. About 1750 the use of coke in the blast furnace began. The means were thus given for producing iron in practically unlimited quantities, without dependence for fuel on forests easily exhaustible; and in the latter part of the century, when the steam-engine supplied the motive power for the necessary strong blast, production by means of coke increased with great rapidity.[1] At the same time, in 1783 and 1784, came the inventions of Cort for puddling and rolling iron. By these the transformation of pig-iron into bar-iron of convenient sizes was effected in large quantities. Before the inventions of Cort, pig-iron had been first converted into bar under the hammer, and the bar, at a second distinct operation in a slitting mill, converted into bars and rods of convenient size. The rolled bar made by the processes of puddling and rolling—which are still in common use—is

[1] See the good account of the importance of the use of coke (coal) in Jevons, "The Coal Question," ch. XV., pp. 309-316.

inferior in quality, at least after the first rolling, to the hammered and slit iron, known as hammered bar, produced by the old method. Cort's processes, however made the iron much more easily and cheaply, and the lower price of the rolled iron more than compensated, for most purposes, for its inferior quality. At the same time these processes made easy and fostered the change from production on a small sale to production on a large scale. This tended to bring about still greater cheapness, and made the revolution in the production of iron as great as that in the textile industries, and similar to it in many important respects.

During the period 1789–1808 these changes in the iron manufacture were too recent to have had any appreciable effect on the conditions of production and supply in the United States. The manufacture of iron, and its transformation into implements of various kinds, went on without change from the methods of the colonial period. Pig-iron continued to be made and converted into hammered bar in small and scattered works and forges.[1] No pig-iron seems to have been imported. Bar-iron was imported, in quantities not inconsiderable, from Russia[2]; but no crude iron was imported from England. The importations of certain iron articles, not much advanced beyond the crude state, such as nails, spikes, anchors, cables, showed a perceptible increase during this period.[3]

[1] French, "Hist. of Iron Manufacture," p. 16. [2] *Ibid.*, p. 13.

[3] The imports of iron, so far as separately stated in the Treasury reports, may be found in Young's Report on Tariff Legislation, pp. XXVI.-XXXVI. Cp. Grosvenor, "Does Protection Protect?" pp. 174, 175.

Whether this increase was the result of the general conditions which tended to swell imports during this period, or was the first effect of the new position which England was taking as an iron-making country, cannot be determined. Information on the state of the industry during this period is meagre; but it seems to have been little affected by the protective duties which Congress enacted on nails, steel, and some other articles. No protection was attempted to be given to the production of pig or bar-iron, for it was thought that the domestic producers would be able to compete successfully with their foreign competitors in this branch of the iron-trade.

During the period of restriction from 1808 to 1815, the iron and manufactures of iron previously imported, had to be obtained, as far as possible, at home. A large increase in the quantity of iron made in the country accordingly took place. The course of events was so similar to that already described in regard to textile manufactures that it need not be referred to at length. When peace came, there were unusually heavy importations of iron, prices fell rapidly, and the producers had to go through a period of severe depression.

In 1816 Congress was asked to extend protection to the manufacture of iron, as well as to other industries. The tariff of 1816 imposed a duty of 45 cents a hundredweight on hammered-bar iron, and one of $1.50 a hundred-weight on rolled bar, with corresponding duties on sheet, hoop, and rod iron. Pig-iron was admitted under

an *ad valorem* duty of 20 per cent. At the prices of bar-iron in 1816, the specific duty on hammered bar was equivalent to about 20 per cent.,[1] and was, therefore, but little higher than the rates of 15 and 17½ per cent. levied in 1804 and 1807. The duty on rolled bar was much higher, relatively to price, as well as absolutely, than that on hammered bar, and was the only one of the iron duties of 1816 which gave distinct and vigorous protection. These duties were not found sufficient to prevent the manufacturers from suffering heavy losses, and more effective protection was demanded. In 1818, Congress, by a special act, raised the duties on iron considerably, at the same time, as was noted above,[2] that it postponed the reduction from 25 to 20 per cent. on the duty on cottons and woollens. Both of these measures were concessions to protective feeling, and they may have been the result of an uneasy consciousness of the disturbed state of the country and of the demand for protection which was to follow the financial crisis of the next year.[3] The act of 1818 fixed the duty on pig-iron at 50 cents per hundred-weight—the first specific duty imposed on pig-iron; hammered bar was charged with 75 cents a hundred-weight, instead of 45 cents, as in 1816; and higher duties were put on castings, anchors, nails, and spikes.[4] These duties

[1] See the tables of prices in French, pp. 35, 36.

[2] *Ante*, p. 27.

[3] There is nothing in the Congressional debates on the acts of 1818 to show what motives caused them to be passed.

[4] "Statutes at Large," III., 460.

were comparatively heavy; and with a steady fall in the price of iron, especially after the crisis of 1818–19, they became proportionately heavier and heavier. Nevertheless, in the tariff of 1824 they were further increased. The rate on hammered bar went up to 90 cents a hundred-weight; that on rolled bar still remained at $1.50, as it had been fixed in 1816. In 1828 a still further increase was made in the specific duties on all kinds of iron, although the continual fall in prices was of itself steadily increasing the weight of the specific duties. The duty on pig-iron went up to 62½ cents a hundred-weight; that on hammered bar to a cent a pound (that is, $1.12 a hundred-weight); that on rolled bar to $37 a ton. In 1832 duties were reduced in the main to the level of those of 1824, and in 1833 the Compromise Act, after maintaining the duties of 1832 for two years, gradually reduced them still further, till in 1842 they reached a uniform level of 20 per cent. On the whole, it is clear that after 1818 a system of increasingly heavy protection was applied to the iron manufacture, and that for twenty years this protection was maintained without a break. From 1818 till 1837 or 1838, when the reduction of duty under the Compromise Act began to take effect to an appreciable extent, the duties on iron in its various forms ranged from 40 to 100 per cent. on the value.

It is worth while to dwell for a moment on the heavy duty on rolled iron—much higher than that on hammered iron—which was adopted in 1816, and maintained through-

out this period. Congress attempted to ward off the competition of the cheaper rolled iron by this heavy discriminating duty, which in 1828 was equivalent to one hundred per cent. on the value. When first established in 1816, the discrimination was defended on the ground that the rolled iron was of inferior quality, and that the importation of the unserviceable article should be impeded for the benefit of the consumer. The scope of the change in the iron manufacture, of which the appearance of rolled iron was one sign, was hardly understood in 1816 and 1818, and this argument against its use may have represented truthfully the animus of the discriminating duty. But in later years the wish to protect the consumer from impositions hardly continued to be the motive for retaining the duty. Rolled bar-iron soon became a well-known article, of considerable importance in commerce. The discriminating duty was retained throughout, and in 1828 even increased ; it was still levied in the tariff of 1832 ; it reappeared when the Whigs carried the tariff of 1842 ; and it did not finally disappear till 1846. The real motive for maintaining the heavy tax through these years undoubtedly was the unwillingness of the domestic producers to face the competition of the cheaper article. The tax is a clear illustration of that tendency to fetter and impede the progress of improvement which is inherent in protective legislation. It laid a considerable burden on the community, and, as we shall see, it was of no service in encouraging the early growth of the iron

industry. It is curious to note that the same contest against improved processes was carried on in France, by a discriminating duty on English rolled iron, levied first in 1816, and not taken off till 1860.[1]

After 1815 the iron-makers of the United States met with strong foreign competition from two directions. In the first place, English pig and rolled iron was being produced with steadily decreasing cost. The use of coke became universal in England, and improvements in methods of production were constantly made. Charcoal continued to be used exclusively in the furnaces of this country; for the possibility of using anthracite had not yet been discovered, and the bituminous coal fields lay too far from what was then the region of dense population to be available. While coke-iron was thus driving out charcoal-iron for all purposes for which the former could be used, the production of charcoal-iron itself encountered the competition of Sweden and Russia. As the United States advanced in population, the more accessible forests became exhausted, and the greater quantity of charcoal-iron needed with the increase of population and of production, could be obtained at home only at higher cost. The Scandinavian countries and Russia, with large forests and a population content with low returns for labor, in large part supplied the increased quantity at lower rates than the iron-makers of this country. Hence the imports of iron show a steady increase, both those of pig-iron and

[1] Amé, "Études sur les Tarifs de Douanes," I., 145.

and those of rolled and hammered bar; the rolled bar coming from England, and the hammered bar from Sweden and Russia. The demand for iron was increasing at a rapid rate, and there was room for an increase both of the domestic production and of imports; but the rise in imports was marked. Notwithstanding the heavy duties, the proportion of imported to domestic iron from 1818 to 1840 remained about the same.[1]

Since importations continued regularly and on a considerable scale, the price of the iron made at home was clearly raised, at the seaboard, over the price of the foreign iron by the amount of the duty. The country, therefore, paid the iron tax probably on the greater part used, whether of foreign or domestic origin, in the shape of prices from forty to one hundred per cent. higher than those at which the iron could have been bought abroad.

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[1] On the production and imports of iron in the years after 1830 the reader is referred to the remarks on p. 124, and to the "Quarterly Journal of Economics," vol. II., p. 377. Until the middle of the decade 1820–30 the annual product of pig-iron is supposed to have been about 50,000 tons, while in the second half of the decade it is put at 100,000 tons and more. The imports of crude iron averaged about 20,000 tons per year in 1818–21, about 30,000 tons in 1822–27, and rose to an average of about 40,000 tons in 1828–30. These figures as to imports refer mainly to bar-iron; and as it required in those days about $1\frac{2}{3}$ tons of pig to make a ton of bar (French, p. 54), some additions must be made to the imports of bar before a proper comparison can be made between the domestic and the imported supply. An addition must also be made for the considerable imports of steel, sheet-iron, anvils, anchors, and other forms of manufactured iron. Figures of imports are given in Grosvenor, pp. 198, 199; of domestic production, by R. W. Raymond, in A. S. Hewitt's pamphlet on "A Century of Mining and Metallurgy," page 31.

The fact that the manufacture, notwithstanding the heavy and long-continued protection which it enjoyed, was unable to supply the country with the iron which it needed, is of itself sufficient evidence that its protection as a young industry was not successful. It is an essential condition for the usefulness of assistance given to a young industry, that the industry shall ultimately supply its products at least as cheaply as they can be obtained by importation; and this the iron manufacture failed to do. There is, however, more direct evidence than this, that the manufacture was slow to make improvements in production, which might have enabled it eventually to furnish the whole supply needed by the country, and in this way might have justified the heavy taxes laid for its benefit. Pig-iron continued to be made only with charcoal. The process of puddling did not begin to be introduced before 1830, and then inefficiently and on a small scale.[1] Not until the decade between 1830 and 1840, at a time when the Compromise Act of 1833 was steadily decreasing duties, was puddling generally introduced.[2] The iron rails needed for the railroads built at this time—the first parts of the present railroad system—were supplied exclusively by importation. In 1832 an act of Congress had provided that duties should be refunded on all imported rails laid down within three years from the date

[1] See an excellent article, by an advocate of protection, in the *American Quarterly Review*, Vol. IX. (1831), pp. 376, 379, which gives very full information in regard to the state of the iron manufacture at that date.

[2] French, p. 56.

of importation. Under this act all the first railroads imported their rails without payment of duty. Finally, the great change which put the iron manufacture on a firm and durable basis did not come till the end of the decade 1830–40, when all industry was much depressed, and duties had nearly reached their lowest point. That change consisted in the use of anthracite coal in the blast-furnace. A patent for smelting iron with anthracite was taken out in 1833; the process was first used successfully in 1836. In 1838 and 1839 anthracite began to be widely used. The importance of the discovery was promptly recognized; it was largely adopted in the next decade, and led, among other causes, to the rapid increase of the production of iron, which has been so often ascribed exclusively to the protection of the tariff of 1842. With this change the growth of the iron manufacture on a great scale properly begins.[1]

It seems clear that no connection can be traced between the introduction and early progress of the iron manufacture, and protective legislation. During the colonial period, as we have seen, under the old system of production of iron, the country had exported and not imported iron. The production of charcoal-iron and of hammered bar was carried on before the adoption of the Constitution. During the first twenty years after 1789, the iron-makers

[1] Swank's Report on "Iron and Steel Production," in the Census of 1880, p. 114. A fuller discussion of the introduction of the use of anthracite, and of the effect of protective duties after this had been done, will be found at pages 122–134.

still held their own, although the progress of invention elsewhere, and the general tendency in favor of heavy imports, caused a growing importation from abroad. The production of iron by the old methods and with the use of charcoal was therefore in no sense a new industry. If the business of making charcoal-iron could not be carried on or increased during this and the subsequent period, the cause must have lain in natural obstacles and disadvantages which no protection could remove. After 1815, the new régime in the iron trade had begun; the use of coke in the blast-furnace, and the production of wrought-iron by puddling and rolling, had changed completely the conditions of production. The protective legislation which began in 1818, and continued in force for nearly twenty years, was intended, it is true, to ward off rather than to encourage the adoption of the new methods; but it is conceivable that, contrary to the intentions of its authors, it might have had the latter effect. No such effect, however, is to be seen. During the first ten or fifteen years after the application of protection, no changes of any kind took place. Late in the protective period, and at a time when duties were becoming smaller, the puddling process was introduced. The great change which marks the turning-point in the history of the iron manufacture in the United States—the use of anthracite—began when protection ceased. It is probably not true, as is asserted by advocates of free trade,[1] that protection had

[1] *E. g.*, Grosvenor, p. 197.

any appreciable influence in retarding the use of coal in making iron. Other causes, mainly the refractory nature of the fuel, sufficiently account for the failure to use anthracite at an earlier date. The successful attempts to use anthracite were made almost simultaneously in England and in the United States.[1] The failure to use coke from bituminous coal, which had been employed in England for over half-a-century, was the result of the distance of the bituminous coal-fields from the centre of population, and of the absence of the facility of transportation which has since been given by railroads. It is hardly probable, therefore, that protection exercised any considerable harmful influence in retarding the progress of improvement. But it is clear, on the other hand, that no advantages were obtained from protection in stimulating progress. No change was made during the period of protection which enabled the country to obtain the metal more cheaply than by importation, or even as cheaply. The duties simply taxed the community; they did not serve to stimulate the industry, though they probably did not appreciably retard its growth. We may therefore conclude that the duties on iron during the generation after 1815 formed a heavy tax on consumers; that they impeded, so far as they went, the industrial development of the country; and that no compensatory benefits were obtained to offset these disadvantages.

[1] Swank, pp. 114, 115.

VI.

CONCLUDING REMARKS.

THE three most important branches of industry to which protection has been applied, have now been examined. It has appeared that the introduction of the cotton manufacture took place before the era of protection, and that—looking aside from the anomalous conditions of the period of restriction from 1808 to 1815—its early progress, though perhaps somewhat promoted by the minimum duty of 1816, would hardly have been much retarded in the absence of protective duties. The manufacture of woollens received little direct assistance before it reached that stage at which it could maintain itself without help, if it were for the advantage of the country that it should be maintained. In the iron manufacture twenty years of heavy protection did not materially alter the proportion of home and foreign supply, and brought about no change in methods of production. It is not possible, and hardly necessary, to carry the inquiry much further. Detailed accounts cannot be obtained of other industries to which protection was applied; but so far as can be seen, the same course of

events took place in them as in the three whose history we have followed. The same general conditions affected the manufactures of glass, earthenware, paper, cotton-bagging, sail-duck, cordage, and other articles to which protection was applied during this time with more or less vigor. We may assume that the same general effect, or absence of effect, followed in these as in the other cases. It is not intended to speak of the production of agricultural commodities like sugar, wool, hemp, and flax, to which also protection was applied. In the production of these the natural advantages of one country over another tell more decidedly and surely than in the case of most manufactures, and it has not often been supposed that they come within the scope of the argument we are considering.

Although, therefore, the conditions existed under which it is most likely that protection to young industries may be advantageously applied—a young and undeveloped country in a stage of transition from a purely agricultural to a more diversified industrial condition; this transition, moreover, coinciding in time with great changes in the arts, which made the establishment of new industries peculiarly difficult—notwithstanding the presence of these conditions, little, if any thing, was gained by the protection which the United States maintained in the first part of this century. Two causes account for this. On the one hand, the character of the people rendered the transition of productive forces to manufactures com-

paratively easy; on the other hand, the shock to economic habits during the restrictive period from 1808 to 1815 effectually prepared the way for such a transition. The genius of the people for mechanical arts showed itself early. Naturally it appeared with most striking results in those fields in which the circumstances of the country gave the richest opportunities; as in the application of steam-power to navigation, in the invention and improvement of tools, and especially of agricultural implements, and in the cotton manufacture. The ingenuity and inventiveness of American mechanics have become traditional, and the names of Whitney and Fulton need only be mentioned to show that these qualities were not lacking at the time we are considering. The presence of such men rendered it more easy to remove the obstacles arising from want of skill and experience in manufactures. The political institutions, the high average of intelligence, the habitual freedom of movement from place to place and from occupation to occupation, also made the rise of the existing system of manufacturing production at once more easy and less dangerous than the same change in other countries. At the same time it so happened that the embargo, the non-intercourse acts, and the war of 1812 rudely shook the country out of the grooves in which it was running, and brought about a state of confusion from which the new industrial system could emerge more easily than from a well-settled organization of industry. The restrictive period may indeed be considered to

have been one of extreme protection. The stimulus which it gave to some manufactures perhaps shows that the first steps in these were not taken without some artificial help. The intrinsic soundness of the argument for protection to young industries therefore may not be touched by the conclusions drawn from the history of its trial in the United States, which shows only that the intentional protection of the tariffs of 1816, 1824, and 1828 had little effect. The period from 1808 till the financial crisis of 1818–19 was a disturbed and chaotic one, from which the country settled down, with little assistance from protective legislation, into a new arrangement of its productive forces.

The system of protective legislation began in 1816, and was maintained till toward the end of the decade 1830–40. The Compromise Act of 1833 gradually undermined it. By 1842 duties reached a lower point than that from which they had started in 1816. During this whole period the argument for protection to young industries had been essentially the mainstay of the advocates of protection, and the eventual cheapness of the goods was the chief advantage which they proposed to obtain. It goes without saying that this was not the only argument used, and that it was often expressed loosely in connection with other arguments. One does not find in the popular discussions of fifty years ago, more than in those of the present, precision of thought or expression. The "home market" argument, which, though essentially distinct from that for

young industries, naturally suggests itself in connection with the latter, was much urged during the period we are considering. The events of the War of 1812 had vividly impressed on the minds of the people the possible inconvenience, in case of war, of depending on foreign trade for the supply of articles of common use; this point also was much urged by the protectionists. Similarly the want of reciprocity, and the possibility of securing, by retaliation, a relaxation of the restrictive legislation of foreign countries, were often mentioned. But any one who is familiar with the protective literature of that day,—as illustrated, for instance, in the columns of "Niles's Register,"—cannot fail to note the prominent place held by the young-industries argument. The form in which it most commonly appears is in the assertion that protection normally causes the prices of the protected articles to fall,[1] an assertion which was supposed, then as now, to be sufficiently supported by the general tendency toward a fall in the price of manufactured articles, consequent on the great improvement in the methods of producing such articles.

Shortly after 1832, the movement in favor of protection, which had had full sway in the Northern States since 1820, began to lose strength. The young-industries

[1] See, for instance, the temperate report of J. Q. Adams, in 1832, in which this is discussed as the chief argument of the protectionists. Adams, though himself a protectionist, refutes it, and bases his faith in protection chiefly on the loss and inconvenience suffered through the interruption of foreign trade in time of war. The report is in "Reports of Committees, 22d Congress, 1st Session, vol. V., No. 481.

argument at the same time began to be less steadily pressed. About 1840 the protective controversy took a new turn. It seems to have been felt by this time that manufactures had ceased to be young industries, and that the argument for their protection as such, was no longer conclusive. Another position was taken. The argument was advanced that American labor should be protected from the competition of less highly paid foreign labor. The labor argument had hardly been heard in the period which has been treated in the preceding pages. Indeed, the difference between the rate of wages in the United States and in Europe, had furnished, during the early period, an argument for the free-traders, and not for the protectionists. The free-traders were then accustomed to point to the higher wages of labor in the United States as an insuperable obstacle to the successful establishment of manufactures. They used the wages argument as a foil to the young-industries argument, asserting that as long as wages were so much lower in Europe, manufacturers would not be able to maintain themselves without aid from the government. The protectionists, on the other hand, felt called on to explain away the difference of wages; they endeavored to show that this difference was not so great as was commonly supposed, and that, so far as it existed, it afforded no good reason against adopting protection.[1] About 1840, the positions of the con-

[1] See, among others, Clay's Tariff Speech of 1824, "Works," I., 465-466.

tending parties began to change.[1] The protectionists began to take the offensive on the labor question: the free-traders were forced to the defensive on this point. The protectionists asserted that high duties were necessary to shut out the competition of the ill-paid laborers of Europe, and to maintain the high wages of the laborers of the United States. Their opponents had to explain and defend on the wages question. Obviously this change in the line of argument indicates a change in the industrial situation. Such an argument in favor of protection could not have arisen at a time when protective duties existed but in small degree, and when wages nevertheless were high. Its use implies the existence of industries which are supposed to be dependent on high duties. When the protective system had been in force for some time, and a body of industries had sprung up which were thought to be able to pay current wages only if aided by high duties, the wages argument naturally suggested itself. The fact that the

[1] Same signs of the appeal for the benefit of labor appear as early as 1831 in a passage in Gallatin's "Memorial," p. 31, and again in a speech of Webster's in 1833, "Works," I., 283. In the campaign of 1840, little was heard of it, doubtless because other issues than protection were in the foreground. Yet Calhoun was led to make a keen answer to it in a speech of 1840, "Works," III., 434. In the debates on the tariff act of 1842, we hear more of it; see the speeches of Choate and Buchanan, *Congr. Globe*, 1841–42, pp. 950, 953, and Calhoun's allusion to Choate, in Calhoun's "Works," IV., 207. In 1846 the argument appeared full-fledged, in the speeches of Winthrop, Davis, and others, *Congr. Globe*, 1846, Appendix, pp., 967, 973, 1114. See also a characteristic letter in Niles, vol. 62, p. 262. Webster's speech in 1846, "Works," V., 231, had much about protection and labor, but in a form somewhat different from that of the argument we are nowadays familiar with.

iron manufacture, which had hitherto played no great part in the protective controversy, became, after 1840, the most prominent applicant for aid, accounts in large part for the new aspect of the controversy. The use of the wages argument, and the rise of the economic school of Henry C. Carey, show that the argument for young industries was felt to be no longer sufficient to be the mainstay of the protective system. The economic situation had changed, and the discussion of the tariff underwent a corresponding change.

THE EARLY PROTECTIVE MOVEMENT AND THE TARIFF OF 1828.

In the present essay we shall consider, not so much the economic effect of the tariff, as the character of the early protective movement and its effect on political events and on legislation.

The protective movement in this country has been said to date from the year 1789, even from before 1789; and more frequently it has been said to begin with the tariff act of 1816. But whatever may have been, in earlier years, the utterances of individual public men, or the occasional drift of an uncertain public opinion, no strong popular movement for protection can be traced before the crisis of 1818–19. The act of 1816, which is generally said to mark the beginning of a distinctly protective policy in this country, belongs rather to the earlier series of acts, beginning with that of 1789, than to the group of acts of 1824, 1828, and 1832. Its highest permanent rate of duty was twenty per cent., an increase over the previous rates which is chiefly accounted for by the heavy interest charge on the debt incurred during the war. But after the crash of 1819, a movement in favor of protection set in, which

was backed by a strong popular feeling such as had been absent in the earlier years. The causes of the new movement are not far to seek. On the one hand there was a great collapse in the prices of land and of agricultural products, which had been much inflated during the years from 1815 to 1818. At the same time the foreign market for grain and provisions, which had been highly profitable during the time of the Napoleonic wars, and which there had been a spasmodic attempt to regain for two or three years after the close of our war in 1815, was almost entirely lost. On the other hand, a large number of manufacturing industries had grown up, still in the early stages of growth, and still beset with difficulties, yet likely in the end to hold their own and to prosper. That disposition to seek a remedy from legislation, which always shows itself after an industrial crisis, now led the farmers to ask for a home market, while the manufacturers wanted protection for young industries. The distress that followed the crisis brought out a plentiful crop of pamphlets in favor of protection, of societies and conventions for the promotion of domestic industry, of petitions and memorials to Congress for higher duties. The movement undoubtedly had deep root in the feelings and convictions of the people, and the powerful hold which protective ideas then obtained influenced the policy of the nation long after the immediate effects of the crisis had ceased to be felt.[1]

[1] The character of the protective movement after 1819 is best illustrated by the numerous pamphlets of Matthew Cary. See especially the "Appeal

The first effect of this movement was seen in a series of measures which were proposed and earnestly pushed in Congress in the session of 1819–20. They included a bill for a general increase of duties, one for shortening credits on duties, and one for taxing sales by auction of imported goods. The first of these very nearly took an important place in our history, for it was passed by the House, and failed to pass the Senate by but a single vote. Although it did not become law, the protective movement which was expressed in the votes and speeches on it remained unchanged for several years, and brought about the act of 1824, while making possible the act of 1828. Some understanding of the state of feeling in the different sections of the country is necessary before the peculiar events of 1828 can be made clear, and it may be conveniently reached at this point.

The stronghold of the protective movement was in the Middle and Western states of those days—in New York, New Jersey, Pennsylvania, Ohio, and Kentucky. They were the great agricultural States; they felt most keenly the loss of the foreign market of the early years of the century, and were appealed to most directly by the cry for a home market. At the same time they had been most deeply involved in the inflation of the years 1816–19, and were in that condition of general distress and confusion which

to Common Sense and Common Justice" (1822) and "The Crisis: A Solemn Appeal," etc. (1823). "Niles's Register," which had said little about tariff before 1819, thereafter became a tireless and effective advocate of protection.

leads people to look for some panacea. The idea of protection as a cure for their troubles had obtained a strong hold on their minds. It is not surprising, when we consider the impetuous character of the element in American democracy at that time represented by them, that the idea was applied in a sweeping and indiscriminate manner. They wanted protection not only for the manufactures that were to bring them a home market, but for many of their own products, such as wool, hemp, flax, even for wheat and corn. For the two last mentioned they asked aid more particularly in the form of higher duties on rum and brandy, which were supposed to compete with spirits distilled from home-grown grain. A duty on molasses was a natural supplement to that on rum. Iron was already produced to a considerable extent in Pennsylvania and New Jersey, and for that also protection was asked.

In New England there was a strong opposition to many of these demands. The business community of New England was still made up mainly of importers, dealers in foreign goods, shipping merchants, and vessel-owners, who naturally looked with aversion at measures that tended to lessen the volume of foreign trade. Moreover, they had special objections to many of the duties asked for by the agricultural states. Hemp in the form of cordage, flax in the form of sail duck, and iron, were important items in the cost of building and equipping ships. The duties on molasses and rum were aimed at an industry carried on almost exclusively in New England:

the importation of molasses from the West Indies in exchange for fish, provisions, and lumber, and its subsequent manufacture into rum. Wool was the raw material of a rapidly growing manufacture. So far the circumstances led to opposition to the protective movement. On the other hand, the manufacture of cotton and woollen goods was increasing rapidly and steadily, and was the moving force of a current in favor of protection that became stronger year by year. We have seen that the beginning of New England's manufacturing career dates back to the War of 1812. Before 1820 she was fairly launched on it, and between 1820 and 1830 she made enormous advances. The manufacturers carried on a conflict, unequal at first, but rapidly becoming less unequal, with the merchants and ship-owners. As early as 1820 Connecticut and Rhode Island were pretty firmly protective; but Massachusetts hesitated. Under the first weight of the crisis of 1819, the protective feeling was strong enough to cause a majority of her congressmen to vote for the bill of 1820. But there was great opposition to that bill, and after 1820 the protective feeling died down.[1] In 1824 Massachusetts was still disinclined to adopt the protective system, and it was not until the end of the decade that she came

[1] The vote on the bill of 1820, by States, is given in Niles, XVIII., 169. Of the Massachusetts members 19 voted yes, 6 no, and 4 were absent. Of the New England members 19 voted yes, 9 no, and 9 were absent. The opposition to the bill in Massachusetts was the occasion of a meeting at which Webster made his first speech on tariff, which is not reprinted in his works, but may be found in the newspapers of the day.

squarely in line with the agricultural states on that subject.

The South took its stand against the protective system with a promptness and decision characteristic of the political history of the slave states. The opposition of the Southern members to the tariff bill of 1820 is significant of the change in the nature of the protective movement between 1816 and 1820. The Southern leaders had advocated the passage of the act of 1816, but they bitterly opposed the bill of 1820. It is possible that the Missouri Compromise struggle had opened their eyes to the connection between slavery and free trade.[1] At all events, they had grasped the fact that slavery made the growth of manufactures in the South impossible, that manufactured goods must be bought in Europe or in the North, and that, wherever bought, a protective tariff would tend to make them dearer. Moreover, Cotton was not yet King, and the South was not sure that its staple was indispensable for all the world. While the export of cotton on a large scale had begun, it was feared that England, in retaliation for high duties on English goods, might tax or exclude American cotton.

Such was in 1820 the feeling in regard to the protective system in the different parts of the country. After the failure of the bill of that year, the movement for higher duties seems for a while to have lost headway. The low-

[1] But no reference was made to the Missouri struggle in the debates on the tariff bill of 1820.

est point of industrial and commercial depression, so far as indicated by the revenue, was reached at the close of 1820, and, as affairs began to mend, protective measures received less vigorous support. Bills to increase duties, similar to the bill of 1820, were introduced in Congress in 1821 and 1822, but they were not pressed and led to no legislation.[1]

Public opinion in most of the Northern States, however, continued to favor protection; the more so because, after the first shock of the crisis of 1819 was over, recovery, though steady, was slow. As a Presidential election approached and caused public men to respond more readily to popular feeling, the protectionists gained a decided victory. The tariff of 1824 was passed, the first and the most direct fruit of the early protective movement. The Presidential election of that year undoubtedly had an effect in causing its passage; but the influence of politics and political ambition was in this case hardly a harmful one. Not only Clay, the sponsor of the American System, but Adams, Crawford, and Jackson were declared advocates of protection. Party lines, so far as they existed at all, were not regarded in the vote on the tariff. It was carried mainly by the votes of the Western and Middle

[1] See the interesting account of a Cabinet meeting in November, 1821, in "J. Q. Adams's Memoirs," vol. V., pp. 408–411. "The lowest point of the depression was reached at the close of last year" [1820]. Calhoun thought "the prosperity of the manufacturers was now so clearly established that it might be mentioned in the message as a subject for congratulation." Crawford said "there would not be much trouble in the ensuing session with the manufacturing interest," and Adams himself "had no apprehension that there would be much debate on manufacturing interests."

states. The South was in opposition, New England was divided ; Rhode Island and Connecticut voted for the bill, Massachusetts and the other New England states were decidedly opposed.[1]

The opposition of Massachusetts was the natural result of the character of the new tariff. The most important changes made by it were in the increased duties on iron, lead, wool, hemp, cotton-bagging, and other articles whose protection was desired chiefly by the Middle and Western States. The duties on textile fabrics, it is true, were also raised. Those on cotton and woollen goods went up from 25 to 33⅓ per cent. This increase, however, was offset, so far as woollens were concerned, by the imposition of a duty of 30 per cent. on wool, which had before been admitted at 15 per cent. The manufacturers of woollen goods were, therefore, as far as the tariff was concerned, in about the same position as before.[2] The heavier duties

[1] John Randolph said, in his vigorous fashion, of the tariff bill of 1824 : "The merchants and manufacturers of Massachusetts and New Hampshire repel this bill, while men in hunting shirts, with deerskin leggings and moccasins on their feet, want protection for home manufactures."—"Debates of Congress, 1824, p. 2370.

[2] This can be shown very easily. The cost of the wool is about one half the cost of making woollen goods. Then we have in 1816 :

Duty on woollens	25	per cent.
Deduct duty on wool, ½ of 15 cent. .	7½	"
Net protection in 1816	17½	"

And in 1824 we have:

Duty on woollens	33⅓	per cent.
Deduct duty on wool, ½ of 30 per cent. .	15	"
Net protection in 1824 . . .	18⅓	"

The rise in duties both on wool and on woollens took place gradually by the terms of the act of 1824. The calculation is based on the final rates, which were reached in 1826.

on iron and hemp, on the other hand, were injurious to the ship-builders.

The manufacture of textiles was rapidly extending in all the New England States. At first that of cottons received most attention, and played the most important part in the protective controversy. But by 1824 the cotton industry was firmly established and almost independent of support by duties. The woollen manufacture was in a less firm position, and in 1824 became the prominent candidate for protection. Between 1824 and 1828 a strong movement set in for higher duties on woollens, which led eventually to some of the most striking features of the tariff act of 1828.

The duties proposed and finally established on woollens were modelled on the minimum duty of 1816 on cottons. By the tariff act of that year, it will be remembered, cotton goods were made subject to a general *ad valorem* duty of 25 per cent.; but it was further provided that "all cotton cloths, whose value shall be less than 25 cents per square yard, shall be taken and deemed to have cost 25 cents per square yard, and shall be charged with duty accordingly." That is, a specific duty of six and a quarter cents a square yard was imposed on all cotton cloths costing twenty-five cents a square yard or less. The minimum duties, originally intended to affect chiefly East Indian goods and goods made from East Indian cotton, had an effect in practice mainly on goods from England, whether made of American or of Indian cotton. In a few

years, as the use of the power loom and other improvements in manufacture brought the price of coarse cottons much below twenty-five cents, the minimum duties became prohibitory. How far they were needed in order to promote the success and prosperity of the cotton manufacture in years following their imposition, we have already discussed.[1] At all events, whether or not in consequence of the duties, large profits were made by those who entered on it, and in a few years the cheaper grades of cotton cloth were produced so cheaply, and of such good quality, that the manufacturers freely asserted that the duty had become nominal, and that foreign competition no longer was feared.

This example had its effect on the manufacturers of woollen goods, and on the advocates of protection in general. In the tariff bill of 1820, minimum duties on linen and on other goods had been proposed. In 1824 an earnest effort was made to extend the minimum system to woollens. The committee which reported the tariff bill of that year recommended the adoption in regard to woollens of a proviso framed after that of the tariff of 1816 in regard to cottons, the minimum valuation being eighty cents a yard. The House first lowered the valuation to forty cents and finally struck out the whole proviso by a scant majority of three votes.[2] There was one great obstacle in the way of a high duty on cheap woollen

[1] See above, pp. 25–36.

[2] The vote was 104 to 101. "Annals of Congress," 1823–24 p. 2310.

goods: they were imported largely for the use of slaves on Southern plantations. Tender treatment of the peculiar institution had already begun, and there was strong opposition to a duty which had the appearance of being aimed against the slave-holders. The application of the minimum principle to other than cheap woollen goods apparently had not yet been thought of; but the idea was obvious, and soon was brought forward.

After 1824 there was another lull in the agitation for protection. Trade was buoyant in 1825, and production profitable. For the first time since 1818 there was a swing in business operations. This seems to have been particularly the case with the woollen manufacturers. During the years from 1815 to 1818–19, they, like other manufacturers, had met with great difficulties; and when the first shock of the crisis of the latter year was over, matters began to mend but slowly. About 1824, however, according to the accounts both of their friends and of their opponents on the tariff question, they extended their operations largely.[1] It is clear that this expansion, such as it was, was not the effect of any stimulus given by the tariff of 1824, for, as we have seen, the encouragement given the woollen manufacturers by that act was no greater than had been given under the act of 1816. At all events, the upward movement lasted but a short time.

[1] See the Report of the Harrisburg Convention of 1827 in Niles, XXXIII., 109; Tibbits, "Essay on Home Market" (1827), pp. 26, 27; Henry Lee, "Boston Report of 1827," pp. 64 *seq.*

In England a similar movement had been carried to the extreme of speculation and had resulted in the crisis of 1825–26. From England the panic was communicated to the United States; but, as the speculative movement had not been carried so far in this country, the revulsion was less severely felt. It seems, however, to have fallen on the woollen manufacturers with peculiar weight. Parliament, it so happened, in 1824 had abolished almost entirely the duty on wool imported into England. It went down from twelve pence to one penny a pound.[1] The imports of woollen goods into the United States had in 1825 been unusually large; the markets were well stocked; the English manufacturers were at once enabled to sell cheaply by the lower price of their raw material, and pushed to do so by the depression of trade.

A vigorous effort was now made to secure legislative aid to the woollen makers, similar to that given the cotton manufacturers. Massachusetts was the chief seat of the woollen industry. The woollen manufacturers held meetings in Boston and united for common action, and it was determined to ask Congress to extend the minimum sys-

[1] It is sometimes said that this reduction of the wool duty in England was undertaken with the express purpose of counteracting the protective duties imposed on woollens in the United States. But there is little ground for supposing that our duties were watched so vigilantly in England, or were the chief occasion for English legislation The agitation for getting rid of the restriction on the import and export of wool began as early as 1819, and during its course very little reference, if any, was made to the American duties. See the sketch in Bischoff's "History of the Woollen and Worsted Manufactures," vol. II., chapters 1 and 2.

tem to woollen goods.[1] The legislature of the State passed resolutions asking for further protection for woollens, and these resolutions were presented in the federal House of Representatives by Webster.[2] A deputation of manufacturers was sent to Washington to present the case to the committee on manufactures. Their efforts promised to be successful. When Congress met for the session of 1826–27, the committee (which in those days had charge of tariff legislation) reported a bill which gave the manufacturers all they asked for.

This measure contained the provisions which, when finally put in force in the tariff of 1828, became the object of the most violent attack by the opponents of protection. It made no change in the nominal rate of duty, which was to remain at 33⅓ per cent. But minimum valuations were added, on the plan of the minima on cottons, in such a way as to carry the actual duty far beyond the point indicated by the nominal rate. The bill provided that all goods costing less than 40 cents a square yard were to pay duty as if they had cost 40 cents; all costing more than 40 cents and less than $2.50 were to be charged as if they had cost $2.50; all costing between $2.50 and $4.00 to be charged as if they had cost $4.00. A similar

[1] The memorial of the manufacturers to Congress is in Niles, XXXI., 185. It asks for minimum duties, on the ground that *ad valorem* duties are fraudulently evaded. For the circular sent out by this committee, see *ibid.*, p. 200.

[2] "American State Papers, Finance," V., 599; "Annals of Congress," 1826–27, p. 1010.

course was proposed in regard to raw wool. The *ad valorem* rate on raw wool was to be 30 per cent. in the first place, and to rise by steps to 40 per cent.; and it was to be charged on all wool costing between 16 cents and 40 cents a pound as if the wool had cost 40 cents. The effect of this somewhat complicated machinery was evidently to levy specific duties both on wool and on woollens. On wool the duty was to be, eventually, 16 cents a pound. On woollens it was to be $13\frac{1}{3}$ cents a yard on woollens of the first class, $83\frac{1}{3}$ cents on those of the second class, and $\$1.33\frac{1}{3}$ on those of the third class.

The minimum system, applied in this way, imposed *ad valorem* duties in form, specific duties in fact. It had some of the disadvantages of both systems. It offered temptations to fraudulent undervaluation stronger than those offered by *ad valorem* duties. For example, under the bill of 1827, the duty on goods worth in the neighborhood of 40 cents a yard would be $13\frac{1}{3}$ cents if the value was less than 40 cents; but if the value was more than 40 cents, the duty would be $83\frac{1}{3}$ cents. If the value could be made to appear less than forty cents, the importer saved 70 cents a yard in duties. Similarly, at the next step in the minimum points, the duty was $83\frac{1}{3}$ cents if the goods were worth less than $2.50, and $\$1.33\frac{1}{3}$ cents if the goods were worth more than $2.50. The temptation to undervalue was obviously very strong under such a system, in the case of all goods which could be brought with any plausibility near one of the minimum points.

On the other hand, the system had the want of elasticity which goes with specific duties. All goods costing between 40 cents and $2.50 were charged with the same duty, so that cheap goods were taxed at a higher rate than dear goods. The great gap between the first and second minimum points (40 cents and $2.50) made this objection the stronger. But that gap was not the result of accident. It was intended to bring about a very heavy duty on goods of the grade chiefly manufactured in this country. The most important domestic goods were worth about a dollar a yard, and their makers, under this bill, would get a protective duty of $83\frac{1}{3}$ cents a yard. The object was to secure a very high duty, while retaining nominally the existing rate of $33\frac{1}{3}$ per cent.

The woollens bill of 1827 had a fate similar to that of the general tariff bill of 1820. It was passed in the House, but lost in the Senate by the casting vote of the Vice-President. In the House the Massachusetts members, with one exception, voted for it, and both Senators from Massachusetts supported it.[1]

This bill having failed, the advocates of protection determined to continue their agitation, and to give it wider scope. A national convention of protectionists was determined on.[2] Meetings were held in the different States

[1] "Congressional Debates," III., 1099, 496.

[2] It is not very clear in what quarter the scheme of holding such a convention had its origin. The first public suggestion came from the Philadelphia Society for the Promotion of Domestic Industry, an association founded by Hamilton, of which Matthew Carey and C. J. Ingersoll were at this time the leading spirits.

in which the protective policy was popular, and delegates were appointed to a general convention. In midsummer of 1827 about a hundred persons assembled at Harrisburg, and held the Harrisburg convention, well known in its day. Most of the delegates were manufacturers, some were newspaper editors and pamphleteers, a few were politicians.[1] The convention did not confine its attention to wool and woollens. It considered all the industries which were supposed to need protection. It recommended higher duties for the aid of agriculture; others on manufactures of cotton, hemp, flax, iron, and glass; and finally, new duties on wool and woollens. The movement was primarily for the aid of the woollen industry; other interests were included in it as a means of gaining strength. The duties which were demanded on woollens were on the same plan as those proposed in the bill of 1827, differing only in that they were higher. The *ad valorem* rate on woollen goods was to be 40 per cent. in the first place, and was to be raised gradually until it reached 50 per cent. It was to be assessed on minimum valuations of fifty cents, two dollars and a half, four dollars, and six dollars a yard. The duty on wool was to be twenty cents a pound in the first instance, and was to be raised each year by $2\frac{1}{2}$ cents until it should reach fifty cents a pound. Needless to say, the duty would be pro-

[1] Among the politicians was Mallary of Vermont, who had been chairman of the committee on manufactures in the preceding Congress, and became the spokesman of the protectionists in the ensuing session, when the tariff of 1828 was passed.

hibitory long before this limit was reached. Wool costing less than eight cents was to be admitted free.[1]

At this point a new factor, which we may call "politics," began to make itself felt in the protective movement. The natural pressure of public opinion on public men had exercised its effect in previous years, and had had its share in bringing about the tariff act of 1824 and the woollens bill of 1827. But the gradual crystallization of two parties, the Adams and Jackson parties,—Whigs and Democrats, as they soon came to be called—put a new face on the political situation, and had an unexpected effect on tariff legislation. The contest between them had begun in earnest before the Harrisburg convention met, and some of the Jackson men alleged that the convention was no more than a demonstration got up by the Adams men as a means of bringing the protective movement to bear in their aid; but this was denied, and such evidence as we have seems to support the denial.[2] Yet

[1] The proceedings of the convention, the address of the people, the memorial to Congress, etc., are in Niles, XXXII. and XXXIII.

[2] I have been able to find little direct evidence as to the political bearing of the Harrisburg convention. Matthew Carey, in a letter of July, 1827, while admitting he is an Adams man, protests against "amalgamating the question of the presidency with that for the protection of manufactures." Niles, XXXII., 389. The (New York) *Evening Post*, a Jackson paper, said the convention was a manœuvre of the Adams men; see its issues of August 1 and August 9, 1827. This was denied in the *National Intelligencer* (Adams) of July 9th, and also in the (New York) *American* (Adams) of July 9th. The *Evening Post* admitted (August 11th) that "doubtless many members of the convention were innocent of political views," and that "the rest were induced to postpone or abandon their political views." Van Buren apparently suspected that the convention might have a political

the Adams men were undoubtedly helped by the protective movement. Although there was not then, nor for a number of years after, a clear-cut division on party lines between protectionists and so-called free traders, the Adams men were more firmly and unitedly in favor of protection than their opponents. Adams was a protectionist, though not an extreme one; Clay, the leader and spokesman of the party, was more than any other public man identified with the American system. They were at least willing that the protective question should be brought into the foreground of the political contest.[1]

The position of the Jackson men, on the other hand,

meaning, and warned its members against forming "a political cabal"; *cf.* the *National Intelligencer* of July 26th. But among the delegates from New York were both Jackson and Adams men. See Hammond, "Political History of New York," II., 256–258; Niles, XXXII., 349. Niles, who was an active member of the convention, denied strenuously that politics had any thing to do with it. Niles, XXXIV., 187.—Since the above was put in type, however, a letter of Clay's has been found which seems to indicate that the movement for holding such a convention was at least started by the anti-Jackson leaders. The letter is printed in the "Quarterly Journal of Economics," vol. II., July, 1888.

[1] There is ground for suspecting that the Adams party would have been willing to make the tariff question the decisive issue of the presidential campaign. Clay made it the burden of his speeches during his journey to the West in the early summer of 1827. Very soon after this, however, the correspondence between Jackson and Carter Beverly was published, and fixed attention on the "bargain and corruption" cry. That was the point which the Jackson managers succeeded in making most prominent in the campaign. Clay dropped the question of protection; he found enough to do in answering the charge that in 1825 a corrupt bargain had made Adams President and himself Secretary of State. See Clay's speech at Pittsburg, June 20, 1827, in Niles, XXXII., 299. On June 29th, Clay published his first denial of the "bargain and corruption" charges. *Ibid.*, p. 350. *Cf.* Parton, "Life of Jackson," III., 111.

was a very difficult one. Their party had at this time no settled policy in regard to the questions which were to be the subjects of the political struggles of the next twenty years. They were united on only one point, a determination to oust the other side. On the tariff, as well as on the bank and internal improvements, the various elements of the party held very different opinions. The Southern members, who were almost to a man supporters of Jackson, were opposed unconditionally not only to an increase of duties, but to the high range which the tariff had already reached. They were convinced, and in the main justly convinced, that the taxes levied by the tariff fell with peculiar weight on the slave States, and their opposition was already tinged with the bitterness which made possible, a few years later, the attempt at nullification of the tariff of 1832. On the other hand, the protective policy was popular throughout the North, more especially in the very States whose votes were essential to Jackson, in New York, Pennsylvania, and Ohio. The Jackson men needed the votes of these States, and were not so confident of getting them as they might reasonably have been. They failed, as completely as their opponents, to gauge the strength of the enthusiasm of the masses for their candidate, and they did not venture to give the Adams men a chance of posing as the only true friends of domestic industry.

The twentieth Congress met for its first session in December, 1827. The elections of 1826, at which its

members were chosen, had not been fortunate for the administration. When Congress met there was some doubt as to the political complexion of the House; but this was set at rest by the election to the speakership of the Democratic candidate, Stephenson of Virginia.[1] The new Speaker, in the formation of the committees, assumed for his party the direction of the measures of the House. On the committee on manufactures, from which the tariff report and the tariff bill were to come, he appointed five supporters of Jackson and two supporters of Adams. The chairmanship, however, was given to one of the latter, Mallary, of Vermont, who, it will be remembered, had been a member of the Harrisburg convention.

Much doubt was entertained as to the line of action the committee would follow. The Adams men feared at first that it would adopt a policy of simple delay and inaction. This fear was confirmed when, a few weeks after the beginning of the session, the committee asked for power to send for persons and papers in order to obtain more information on the tariff,—a request which was opposed by Mallary, their chairman, on the ground that it was made only as a pretext for delay. The Adams men, who formed the bulk of the ardent protectionists, voted with him against granting the desired power. But the Southern members united with the Jackson men from the

[1] Stephenson's election is said to have been brought about by Van Buren's influence; Parton, "Life of Jackson," III., 135. It is worth while to bear this in mind, in view of the part played by Van Buren later in the session.

North, and between them they secured the passage of the resolution asked by the committee.[1] The debate and vote on the resolution sounded the key-note of the events of the session. They showed that the Jackson men from the South and the North, though opposed to each other on the tariff question, were yet united as against the Adams men.[2]

But the policy of delay, if such in fact had been entertained by the opposition, was abandoned. On January 31st, the committee presented a report and a draft of a tariff bill, which showed that they had determined on a new plan, and an ingenious one. What that plan was, Calhoun explained very frankly nine years later, in a speech reviewing the events of 1828 and defending the course taken by himself and his Southern fellow-members.[3] A high-tariff bill was to be laid before the House. It was to contain not only a high general range of duties, but duties especially high on those raw materials on which New England wanted the duties to be low. It was to satisfy the protective demands of the Western and Middle States, and at the same time to be obnoxious to the New England members. The Jackson men of all shades, the protectionists from the North and the free-traders from

[1] The power granted to the committee by this resolution, to examine witnesses, was used to a moderate extent. A dozen wool manufacturers were examined, and their testimony throws some light on the state of the woollen manufacture at that time. See the preceding essay, pp 42–44.

[2] In "Congressional Debates," IV., 862, 870.

[3] Speech of 1837 ; "Works," III., 46–51.

the South, were to unite in preventing any amendments; that bill, and no other, was to be voted on. When the final vote came, the Southern men were to turn around and vote against their own measure. The New England men, and the Adams men in general, would be unable to swallow it, and would also vote against it. Combined, they would prevent its passage, even though the Jackson men from the North voted for it. The result expected was that no tariff bill at all would be passed during the session, which was the object of the Southern wing of the opposition. On the other hand, the obloquy of defeating it would be cast on the Adams party, which was the object of the Jacksonians of the North. The tariff bill would be defeated, and yet the Jackson men would be able to parade as the true "friends of domestic industry."

The bill by which this ingenious solution of the difficulties of the opposition was to be reached, was reported to the House on January 31st by the committee on manufactures.[1] To the surprise of its authors, it was eventually passed both by House and Senate, and became, with a few unessential changes, the tariff act of 1828.

The committee's bill in the first place proposed a large increase of duties on almost all raw materials. The duty on pig-iron was to go up from 56 to 62½ cents per hundredweight, that on hammered bar-iron from 90 to 112 cents per hundredweight, and that on rolled bar from $30

[1] The bill as reported by the committee is printed in "Congressional Debates," IV., 1727:

to $37 per ton. The increase on hammered bar had been asked by the Harrisburg convention. But on pig and on rolled bar no one had asked for an increase, not even the manufacturers of iron who had testified before the committee.[1]

The most important of the proposed duties on raw materials, however, were on hemp, flax, and wool. The existing duty on hemp was $35 per ton. It was proposed to increase it immediately to $45, and further to increase it by an annual increment of $5, till it should finally reach $60. Hemp of coarse quality was largely raised in the country at that time, especially in Kentucky. It was suitable for the making of common ropes and of cotton bagging, and for those purposes met with no competition from imported hemp. Better hemp, suitable for making cordage and cables, was not raised in the country at all, the supply coming exclusively from importation. The preparation of this better quality ("water-rotted" hemp) required so much manual labor, and labor of so disagreeable a character, that it would not have been undertaken in any event by the hemp growers of this country.[2]

[1] See the testimony of the three iron manufacturers who were examined, "American State Papers, Finance," V., 784–792. Mallary, in introducing the bill, said: "The committee gave the manufacturer of iron all he asked, even more." "Congressional Debates," IV., 1748.

[2] Gallatin, "Memorial of the Free-Trade Convention" (1831), p. 51. This admirable paper, perhaps the best investigation on tariff subjects ever made in the United States, is unfortunately not reprinted in the edition of Gallatin's collected works. The original pamphlet is very scarce. The memorial is printed in U. S. Documents, 1st session, 22d Congress, Senate Documents, vol. I., No. 55.

Under such conditions an increase of duty on hemp could be of no benefit to the American grower. Its effect would be simply to burden the rope-makers and the users of cordage, and ultimately the ship-builders and ship-owners. Essentially the same state of things has continued to our own day. The high duties on hemp, which have been maintained from the outset to the present time, have never succeeded in checking a large and continuous importation. The facts were then, and are now, very similar with flax; yet the same duty of $60 per ton was to be put on flax.

On wool a proposal of a similar kind was made. The duty under the tariff of 1824 had been 30 per cent. This was to be changed to a mixed specific and *ad valorem* duty, the first mixed duty ever enacted in the United States. Wool was to pay seven cents a pound (this was reduced to four cents in the act as finally passed), and in addition 40 per cent. in 1828, 45 per cent. in 1829, and thereafter 50 per cent. The object of the mixed duty was to make sure that a heavy tax should be put on coarse wool. The coarse wool, used in the manufacture of carpets and of some cheap flannels and cloths, was not then grown in the United States to any extent, and, indeed, has been grown at no time in this country, but has always been imported, mainly from Asia Minor and from South America. Its cost at the place of exportation was in 1828 from four to ten cents a pound.[1] The

[1] Gallatin, "Memorial," p. 67.

price being so low, a simple *ad valorem* duty would not have affected it much. But the additional specific duty of seven (four) cents weighted it heavily. The *ad valorem* part of the duty reached the higher grades of wool, which were raised in this country; it was calculated to please the farmer. The specific part reached the lower grades, which were not raised in this country, and was calculated to annoy and embarrass the manufacturers. This double object, and especially the second half of it, the Jackson men wanted to attain, and for that reason the policy of admitting the cheap wool at low rates was set aside,—a policy which has been followed in all our protective tariffs, with the sole exception of that of 1828.[1]

Another characteristic part of the scheme was the handling of those duties on woollens that corresponded to the duties on cheap wool. It had been customary to fix low duties on the coarse woollen goods made from cheap wool, partly because of the low duty on the wool

[1] It was followed in 1824, 1832, 1842, and again in the wool and woollens act of 1867, on which the existing duties [1887] are based. The rates on wool have been:

	1828	1832	1842	1867
General duty on wool	30 per cent.	4c. plus 40 per cent.	3c. plus 30 per cent.	10c.–12c. plus 11 per cent.
Duty on cheap wool	15 per cent. on wool under 10c.	free, wool under 8c.	5 per cent. on wool under 7c.	3c. on wool under 12c.

itself, and partly because coarse woollens were used largely for slaves on Southern plantations. Thus in 1824 woollen goods costing less than 33⅓ cents a yard had been admitted at a duty of 25 per cent., while woollens in general paid 33⅓ per cent. In 1828 this low duty on coarse woollens was continued, although the wool of which they were made was subject for the first time to a heavy duty. The object again was to embarrass the manufacturers, and make the bill unpalatable to the protectionists and the Adams men.

The same object appeared in the duty on molasses, which was to be doubled, going from five to ten cents a gallon. A spiteful proviso was added in regard to the drawback which it had been customary to allow on the exportation of rum distilled from imported molasses. The bill of 1828, and the act as finally passed, expressly refused all drawbacks on rum; the intention obviously being to irritate the New Englanders. The animus appeared again in the heavy duty on sail-duck, and the refusal of drawback on sail-duck exported by vessels in small quantities for their own use.[1]

In the duties on woollen goods the changes from the schedule proposed by the Harrisburg convention were on the surface not very great; but in reality they were important. The committee gave up all pretence of *ad*

[1] Sail-duck was charged 9 cents a yard, with an increase of ½ cent yearly, until the duty should finally be 12½ cents. This was equivalent to 40 or 50 per cent. In 1824 the duty had been 15 per cent. Drawback was refused on any quantity less than 50 bolts exported in one vessel at one time.

valorem duties. This was not an insignificant circumstance; for the *ad valorem* rate of the minimum system was said by its opponents to be no more than a device for disguising the heavy duties actually levied under it. The committee brushed aside this device, and made the duties on woollens specific and unambiguous. On goods costing 50 cents a square yard or less, the duty was 16 cents; on goods costing between 50 cents and $1.00, 40 cents; on those costing between $1.00 and $2.50, $1.00; and on those costing between $2.50 and $4.00, $1.60. Goods costing more than $4.00 were to pay 45 per cent. These specific duties, it will be seen, were the same as if an *ad valorem* duty of 40 per cent. had been assessed, on the minimum principle, on valuations of 50 cents, $1.00, $2.50, and $4.00. The changes from the Harrisburg convention scheme were, therefore, the arrangement of specific duties in such a way that they were equivalent to an *ad valorem* rate of but 40 per cent. (the convention had asked 50 per cent.); and, next, the insertion of a minimum point of $1.00, the Harrisburg scheme having allowed no break between 40 cents and $2.50. The first change might have been submitted to by the protectionists; but the second was like putting a knife between the crevices of their armor. We have already noted the importance of the gap between the minimum points of 40 cents and $2.50. A very large part of the imported goods were worth, abroad, in the neighborhood of $1.00; and the largest branch of the domestic manufacture made goods

of the same character and value. The original scheme had given a very heavy duty, practically a prohibitory duty, on these goods, while the new scheme gave a comparatively insignificant duty of 40 cents. As one of the protectionists said: "The dollar minimum was planted in the very midst of the woollen trade." [1]

The bill, in fact, was ingeniously framed with the intention of circumventing the Adams men, especially those from New England. The heavy duties on iron, hemp, flax and wool were bitter pills for them. The new dollar minimum took the life out of their scheme of duties on woollen goods. The molasses and sail-duck duties, and the refusal of drawbacks on rum and duck, were undisguised blows at New England. At the same time, some of these very features, especially the hemp, wool, and iron duties, served to make the bill popular in the Western and Middle States, and made opposition to it awkward for the Adams men. The whole scheme was a characteristic product of the politicians who were then becoming prominent as the leaders of the Democracy, men of a type very different from the statesmen of the preceding generation. Clay informs us that it was one of the many devices that had their origin in the fertile brain of Van

[1] "Congressional Debates," IV., 2274. See the statement of the effect of the minimum system in "State Papers," 1827–28, No. 143. Davis (of Massachusetts) said that the minimum of $1.00 "falls at a point the most favorable that could be fixed for the British manufacturer. * * * It falls into the centre of the great body of American business." "Congressional Debates," IV., 1894, 1895. See to the same effect the speech of Silas Wright, *Ibid.*, p. 1867.

Buren.[1] Calhoun said in 1837 that the compact between the Southern members and the Jackson leaders had come about mainly through Silas Wright; and Wright made no denial.[2]

The result of this curious complication of wishes and motives was seen when the tariff bill was finally taken up in the House in March. Mallary, as chairman of the committee on manufactures, introduced and explained the bill. Being an Adams man, he was of course opposed to it, and moved to amend by inserting the scheme of the Harrisburg convention. The amendment was rejected by decisive votes, 102 to 75 in committee of the whole,[3] and 114 to 80 in the House. The majority which defeated

[1] "I have heard, without vouching for the fact, that it [the tariff of 1828] was so framed on the advice of a prominent citizen, now abroad [Van Buren had been made minister to England in 1831], with the view of ultimately defeating the bill, and with assurances that, being altogether unacceptable to the friends of the American system, the bill would be lost." Clay's speech of February, 1832. "Works" II., 13.

[2] See Calhoun's speech of 1837, as cited above, p. 88. In the debate of 1837, Wright admitted the compact with the Southern members, but said that he had warned them that the New England men in the end might swallow the obnoxious bill. "Congressional Debates," XIII., 922, 926–927. Wright was a member of the committee on manufactures, was the spokesman of the Jackson men who formed the majority of its members, and had charge of the measure before the House. Jenkins, "Life of Wright," pp. 53–60.

The Adams men saw through the scheme at the time. Clay wrote to J. J. Crittenden, in February, even before the House began the discussion of the bill: "The Jackson party are playing a game of brag on the subject of the tariff. They do not really desire the success of their own measure; and it may happen in the sequel that what is desired by neither party will command the votes of both." "Life of Crittenden," I., 67.

[3] "Congressional Debates," IV., 2038.

the amendment was composed of all the Southern members, and of the Jackson members from the North, chiefly from New York, Pennsylvania, Ohio, and Kentucky. The minority consisted almost exclusively of friends of the administration.[1] Mallary then moved to substitute that part only of the Harrisburg convention scheme which fixed the duties on wool and woollens; that is, the original minimum scheme, with a uniform duty of forty per cent. on wool. This too was rejected, but by a narrow vote, 98 to 97.[2] The Jackson men permitted only one change of any moment: they reduced the specific duty on raw wool from seven cents, the point fixed by the committee, to four cents, the *ad valorem* rate remaining at 40 per cent.[3] The duty on molasses was retained, by the same combination that refused to accept the Harrisburg scheme.[4] The Southern members openly said that they meant to make the tariff so bitter a pill that no New England member would be able to swallow it.[5]

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[1] See Niles, XXXV., 57, where the various votes on the bill are ananalyzed. The vote on Mallary's amendment was:

Yeas . . .	78 Adams men,	2 Jackson men	. . .	80
Nays . . .	14 " "	100 " "	. . .	114

[2] " Congressional Debates," IV., 2050.

[3] The Adams men seem to have opposed this reduction. The vote was:

Yeas . . .	10 Adams men,	90 Jackson men	. . .	100
Nays . . .	79 " "	20 " "	. . .	99

[4] On reducing the molasses duty, the vote was:

Yeas . . .	72 Adams men,	10 Jackson men	. . .	82
Nays . . .	19 " "	95 " "	. . .	114

[5] Most of the Southern members kept silence during the debates on the details of the bill. After its third reading, McDuffie and others made long speeches against it. One of the South Carolina Congressmen, however,

When the final vote on the bill came, the groups of members split up in the way expected by the Democrats. The Southern members, practically without exception, voted against it. Those from the Middle and Western States voted almost unanimously for it. The Jackson men voted for their own measure for consistency's sake; the Adams men from these States joined them, partly for political reasons, mainly because the bill, even with the obnoxious provisions, was acceptable to their constituents. Of the New England members, a majority, 23 out of 39, voted in the negative. The affirmative votes from New England, however, were sufficient, when added to those from the West and the Middle States, to ensure its passage. The bill accordingly passed the House.[1]

This result had not been entirely unexpected. The real struggle, it was felt, would come in the Senate, where the South and New England had a proportionately large representation. In previous years the Senate had maintained, in its action on the tariff bills of 1820 and 1824, a

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said frankly: "He should vote for retaining the duty on molasses, because he believed that keeping it in the bill would get votes against its final passage" "Congressional Debates," IV., 2349. The Jackson free-traders from the North (there were a few such) followed the same policy. See Cambreleng's remarks, *ibid.*, 3326. See also the passage quoted in Niles, XXXV., 52.

[1] The vote was:

Yeas	61 Adams men,	44 Jackson men	. . .	105
Nays	35 " "	59 " "	. . .	94

If six of those New England members who voted yea, had voted nay, the bill would have failed. Niles, *loc. cit.*

much more conservative position than the House.[1] But in 1828 the course of events in the Senate was in the main similar to that in the House. The bill was referred to the committee on manufactures, and was returned with amendments, of which the most important referred to the duty on molasses and to the duties on woollen goods. The duty on molasses was to be reduced from 10 cents, the rate fixed by the House, to 7½ cents. The duties on woollen goods, in the bill as passed by the House, had been made specific, equivalent to 40 per cent. on minimum valuations of 50 cents, $1.00, $2.50, and $4.00. The Senate committee's amendment made the duties *ad valorem* in form, to be assessed on the minimum valuation just mentioned. The rate was to be 40 per cent. for the first year; thereafter, 45 per cent.[2]

[1] The tariff of 1824 was much changed in the Senate from the shape in which it had been passed by the House. "Annals of Congress," 1823–24, pp. 723–735.

[2] It was expected that this change to *ad valorem* duties would have still another effect. According to the method then in use for assessing *ad valorem* duties, the dutiable value of goods imported from Europe was ascertained by adding 10 per cent. to the cost or invoice value. See the act of 1828, "Statutes at Large," IV., 274, substantially re-enacting the provisions of the revenue-collection act of 1789, "Statutes at Large," I., 141. It was expected that by the force of this provision the effect of the *ad valorem* rate, under the Senate amendment, would be to increase the duty not merely to 45 per cent., but to 49½ per cent. Hence Webster, in his speech on the bill, spoke of the amendment as carrying the duty "up to 45 or perhaps 50 per cent. *ad valorem*." "Works." III., 231. But the Secretary of the Treasury, Rush, finally decided, very properly, that the provision did not apply to duties assessed on minimum valuations, thereby causing much dissatisfaction among the protectionists. See "Congressional Debates," VI., 802.

Other amendments were proposed, all tending to make the bill less objectionable to the New England Senators. Most of them were rejected. The proposed reduction on molasses was rejected by the same combination that had prevented the reduction from being made in the House. The Southern Senators, and those from the North who supported Jackson, united to retain the duty of 10 cents. When Webster moved to reduce the duty on hemp, only the New England Senators voted with him. Again, an attempt was made to increase the duty on coarse woollens, on which, it will be remembered, the House had put a low rate, notwithstanding the heavy duty on coarse wool. The Senate, by a strict party vote, retained the duty as the House had fixed it. One of the amendments, however, was carried—that which changed the duties on woollens to an *ad valorem* rate of 45 per cent. Two Democratic Senators, Van Buren and Woodbury, who had voted with the South against other amendments, voted in favor of this one. It was carried by a vote of 24 to 22, while all others had been rejected by a vote of 22 to 24.[1]

With this amendment, the bill was finally passed by the Senate, the vote being 26 to 21. The Southern Senators (except two from Kentucky, and one each from Tennessee and Louisiana) voted against it. Those from the Middle and Western States all voted for it. Those from New England split; six voted yea, five nay. The result

[1] The votes in the Senate are given in Niles, XXXIV., 178, 179, 196.

seems to have depended largely on Webster. His colleague Silsbee voted nay, and Webster himself had been in doubt a week before the final vote.[1] Finally he swallowed the bill; and he carried with him enough of the New England Senators to ensure its passage.

Webster defended his course to his constituents on the ground that the woollens amendment (fixing the 45 per cent. *ad valorem* rate) had made the bill much more favorable to the manufacturers. He said he should not have voted for it in the shape in which the House passed it.[2] Calhoun made the same statement in 1837, in the speech to which reference has already been made.[3] No doubt the slight change on woollens mollified in some degree the New England men; but after all, political motives, or, as Webster put it, "other paramount considerations," caused them to swallow the bill. They were afraid to reject it, for fear of the effect in the approaching campaign and election.[4]

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[1] "Memoirs of J. Q. Adams," VII., 530, 534.

[2] In a speech made a month later; printed in his "Works," I., 165. In the House, the representative from Boston had voted against the bill, and Webster commended his action. In his Senate speech Webster had said that, even at the 45 per cent. rate, the duty on woollens was barely sufficient to compensate for the duty on wool. "Works," III., 241.

[3] "Works," III., 50, 51. Calhoun even accused Van Buren of being the "real author" of the tariff of 1828. He said that, but for Van Buren's vote in favor of the woollens amendment, there would have been a tie on the amendment; his own casting vote as Vice-President would have defeated it; the bill, without the amendment, would have been rejected by Webster and the other New England Senators. Therefore, Van Buren was responsible for its having been passed.

[4] After the final vote in the House, John Randolph said: "The bill re-

The act of 1828 had thus been passed in a form approved by no one. It was hardly to be expected that a measure of this kind should long remain on the statute-book, and it was superseded by the act of 1832. During the intervening four years several causes combined to lead to more moderate application of the protective principle. The protective feeling diminished. Public opinion in the North had been wellnigh unanimous in favor of protection between 1824 and 1828; but after 1828, although there was still a large preponderance for protection,[1] there was a strong and active minority against it. The tariff question ceased to be an important factor in politics, so that this obstacle to its straightforward treatment was removed. And, finally, there was a strong desire to make

ferred to manufactures of no sort or kind, except the manufacture of a President of the United States." In 1833, Root, a representative from New York, said: "The act of 1828 he had heard called the bill of Abominations. . . . It certainly grew out of causes connected with President-making. It was fastened on the country in the scuffle to continue the then incumbent in office, on one side, and on the other to oust him and put another in his stead. . . . The public weal was disregarded, and the only question was: Shall we put A or B in the presidential chair? When it was thought necessary to secure a certain State in favor of the then incumbent, a convention was called at Harrisburg to buy them over. [See, however, the note to p. 84, above.] On the other side another convention was called, who mounted the same hobby. The price offered was the same on both sides: a high tariff. One candidate was thought to be a favorite, because he was supposed to be a warm friend of the protective system, and would support a high tariff; but they were told, on the other side, that their candidate would go for as high a tariff." "Congressional Debates," IX., 1104, 1105.

[1] As Gallatin admits: "It is certain that at this time (1832) the tariff system is supported by a majority of the people and of both Houses of Congress." "Works," II., 455.

some concession to the growing opposition of the South. It is true that in 1832 Clay and the more extreme protectionists wished to retain the act of 1828 intact, and to effect reductions in the revenue by lowering the non-protective duties only.[1] But most of the protectionists, led by Adams, took a more moderate course, and consented to the removal of the abominations of 1828.

Even before 1832 some changes were made. In 1830 the molasses abomination was got rid of. The duty on molasses was reduced from ten cents a gallon to five cents, the rate imposed before 1828, and the drawback on exportation of rum was restored.[2] At the same time the duties on tea, coffee, and cocoa were lowered, as one means of reducing the revenue.[3]

The most important step taken in 1832 was the entire abolition of the minimum system. Woollen goods were subjected to[4] a simple *ad valorem* duty of 50 per cent. The minimum system, as arranged in the act of 1828, had been found to work badly. The manufacturers said it had been positively injurious to them.[4] As might have been expected, it led to attempts at evasion of duties, to undervaluation, and to constant disputes at the cus-

[1] "Works," I., 586–595.

[2] "Statutes at Large," IV., 419. The act seems to have passed without debate or opposition.

[3] *Ibid.*, p. 403.

[4] Browne, of Boston, a manufacturer who had actively supported the minimum system, declared: "I could manufacture to better advantage under the tariff of 1816 than under that of 1828; for the duty on wool was then lower, and that on cloths a better protection." Niles. XLI., 204.

tom-houses. The troubles arose mainly under the dollar minimum. Goods worth $1.25 or $1.50 were invoiced so as to bring their values below $1.00, in order to escape the duty under the next minimum point, $2.50. The difficulties were ascribed to the depravity of foreign exporting houses and to the laxity of the revenue laws, and in 1830 a special act in regard to goods made of cotton or wool was passed, making more stringent the provisions for collecting duties. But the troubles continued nevertheless,[1] and, in truth, they were inevitable under a system which imposed specific duties graded according to the value of the goods. Similar duties exist in the present tariff (1887) on some classes of wool and woollens, and lead to the same unceasing complaints of dishonesty and fraud, and the same efforts to make the law effective by close inspection and severer penalties. In 1832, the protectionists themselves swept away the minimum system. The *ad valorem* duty of 50 per cent. which was put in its place was left to be not without its

[1] "Statutes at Large," IV., 400. See the speeches of Mallary, "Congressional Debates," VI., 795–803, and of Davis, *ibid.*, p. 874, for instances and proofs of the frauds. The act provided for forfeiture of goods fraudulently undervalued; but no verdicts under it could be obtained. At the protectionist convention held in New York in 1831, one of the speakers said: "The same mistaken current of opinion which prevailed on 'change, entered and influenced the jury-box. Men thought the law rigorous and severe. They considered it hard that a man should forfeit a large amount of property for a mere attempt to evade an enormous duty. In two years there was but a single case pursued into a court of justice." Niles, XLI., 203. See also the Report on Revenue Frauds, made by a committee of this same convention, in Niles, XLI., Appendix, p. 33.

dangers in the matter of fraud and under-valuation, but it was harmless as compared with the minimum system of 1828.[1]

The other "abominations" of the act of 1828 were also done away with in 1832. The duty on hemp, which had been $60 a ton in 1828, was reduced to a duty of $40. Flax, which had also been subjected to a duty of $60 a ton in 1828, was put on the free list. The duties on pig- and bar-iron were put back to the rates of 1824. The duty on wool alone remained substantially as it had been in 1828, being left as a compound duty of 4 cents a pound and 40 per cent. But even here the special abomination of 1828 was removed; cheap wool, costing less than 8 cents a pound, was admitted free of duty. In fact, the protective system was put back, in the main, to where it had been in 1824. The result was to clear the tariff of the excrescences which had grown on it in 1828, and to put it in a form in which the protectionists could advocate its permanent retention.

Even in this modified form, however, the system could not stand against the attacks of the South. In the following year, 1833, the compromise tariff was passed. It provided for a gradual and steady reduction of duties. That reduction took place; and in July, 1842, a general

[1] J. Q. Adams, who was most active in framing the act of 1832, tried to embody the "home valuation" principle into it; but in vain. "Congressional Debates," VIII., 3658, 3671. He also tried to give the government an option to take goods on its own account at a slight advance over the declared value; but this plan also was rejected. *Ibid.*, p. 3779.

level of 20 per cent. was reached. Two months later, in September, 1842, a new tariff act, again of distinctly protective character, went into effect. But this act belongs to a different period, and has a different character from the acts of 1824, 1828, and 1832. The early protective movement, which began in 1819, and was the cause of the legislation of the following decade, lost its vigor after 1832. Strong popular sentiment in favor of protection wellnigh disappeared, and the revival of protection in 1842 was due to causes different from those that brought about the earlier acts. The change in popular feeling is readily explained. The primary object of the protective legislation of the earlier period had been attained in 1842. The movement was, after all, only an effort, half conscious of its aim, to make more easy the transition from the state of simple agriculture and commerce which prevailed before the war of 1812, to the more diversified condition which the operation of economic forces was reasonably certain to bring about after 1815. The period of transition was passed, certainly by 1830, probably earlier. At all events, very soon after 1820 it was felt that there was not the same occasion as in previous years for measures to tide it over, and a decline in the protective feeling was the natural consequence.

Not the least curious part of the history of the act of 1828 is the treatment it has received from the protectionist writers. At the time, the protectionists were far from enthusiastic about it. Niles could not admit it to

be a fair application of the protective policy,[1] while Matthew Carey called it a "crude mass of imperfection," and admitted it to be a disappointment to the protectionists.[2] In later years, however, when the details of history had been forgotten, it came to be regarded with more favor. The duties being on their face higher than those of previous years, it was considered a better application of protective principles. Henry C. Carey, on whose authority rest many of the accounts of our economic history, called it "an admirable tariff."[3] He represented it as having had great effect on the prosperity of the country, and his statements have often been repeated by protectionist writers.

It is almost impossible to trace the economic effect of any legislative measure that remains in force no more than four years; and certainly we have not the materials for ascertaining the economic effects of the act of 1828. Taken by itself, that act is but a stray episode in our political history. It illustrates the change in the character of our public men and our public life which took place during the Jacksonian time. As an economic measure, it must be considered, not by itself, but as one of a series of

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[1] Niles, XXXVII., 81; XXXVI., 113, and elsewhere. Niles objected especially to the $1.00 minimum on woollens.

[2] See his "Common-Sense Address" (1829), p. XI.; "The Olive Branch," No. III., p. 54; No. IV., p. 3 (1832).

[3] See his "Review of the Report of D. A. Wells" (1869), p. 4; and to the same effect, "Harmony of Interests," p. 5, and "Social Science," II., 225.

measures, begun tentatively in 1816, and carried out more vigorously in 1824, 1828, and 1832, by which a protective policy was maintained for some twenty years. It is very doubtful whether, with the defective information at our disposal, we can learn much as to the effect on the prosperity of the country even of the whole series of tariff acts. Probably we can reach conclusions of any value only on certain limited topics, such as the effects of protection to young industries during this time; as to the general effect of the protective measures we must rely on deduction from general principles. At all events, no one can trace the economic effects of the act of 1828. To ascribe to it the supposed prosperity of the years in which it was in in force, as Henry C. Carey and his followers have done, is only a part of that exaggeration of the effect of protective duties which is as common among their opponents as among their advocates.

THE TARIFF, 1830–1860.

In the years between 1832 and 1860 there was great vacillation in the tariff policy of the United States; there were also great fluctuations in the course of trade and industry. A low tariff was succeeded by a high tariff, which was in turn succeeded by another low tariff. Periods of undue inflation and of great demoralization, of prosperity and of depression, followed each other. The changes in the rates of duty and the fluctuations in industrial history have often been thought to be closely connected. Protectionists have ascribed prosperity to high tariffs, depression to low tariffs; free traders have reversed the inference. It is the object of the present essay to trace, so far as this can be done, the economic effect of tariff legislation during the thirty years of varying fortune that preceded the civil war.

First, by way of introduction, a sketch must be given of the history of the tariff. We begin with the tariff act of 1832, a distinctly protectionist measure, passed by the Whigs, or National Republicans, which put the protective system in a shape such as the advocates of protection hoped it might retain permanently. It levied high duties

on cotton and woollen goods, iron, and other articles to which protection was meant to be applied. On articles not produced in the United States, either low duties were imposed, as on silks, or no duties at all, as on tea and coffee. The average rate on dutiable articles was about 33 per cent.

In 1833, the Compromise Tariff Act was passed, and remained in force until 1842. That act, there can be little doubt, was the result of an agreement between Clay and Calhoun, the leaders of the protectionists and free traders, while it secured also the support of the Jackson administration. Clay had been hitherto the most uncompromising of the protectionists; Calhoun had represented the extreme Southern demand that duties should be reduced to a horizontal level of 15 or 20 per cent.[1] The compromise provided for the retention of a considerable degree of protection for nearly nine years, and thereafter for a rapid reduction to a uniform 20 per cent. rate. The tariff of 1832 was the starting-point. All duties which in that tariff exceeded 20 per cent. were to have one tenth of the excess over 20 per cent. taken off on January 1, 1834; one tenth more on January 1, 1836; again one tenth in 1838; and another in 1840. That is, by 1840, four tenths of the excess over 20 per cent. would be gone.

[1] The Nullifiers had said that such a horizontal rate was the least they were willing to accept. See the Address to the People of the United States by the South Carolina Convention, in the volume of "State Papers on Nullification," published by the State of Massachusetts, p. 69.

Then, on January 1, 1842, one half the remaining excess was to be taken off; and on July 1, 1842, the other half of the remaining excess was to go. After July 1, 1842, therefore, there would be a uniform rate of 20 per cent. on all articles. Obviously, the reduction was very gradual from 1833 till 1842, while in the first six months of 1842 a sharp and sudden reduction was to take place.

Considered as a political measure, the act of 1833 may deserve commendation. As an economic or financial measure, there is little to be said for it. It was badly drafted. No provision was made in it as to specific duties; yet it was obviously meant to apply to such duties, and the Secretary of the Treasury had to take it on himself to frame rules as to the manner of ascertaining the *ad valorem* equivalents of specific duties and making the reductions called for by the act.[1] Again, the reductions of duty were irregular. Thus on one important article, rolled bar-iron, the duty of 1832 had been specific, —$1.50 per hundredweight. This was equivalent, at the prices of 1832, to about 95 per cent. The progress of the reductions is shown in the note.[2] Up to 1842, they were

[1] The instructions issued from the Treasury Department may be found in "Exec. Doc." 1833–34, vol. I., No. 43. It has been thought that the act did not apply to specific duties; but this is a mistake.

[2]

Year.	Duty, per cent.
1834	87
1836	80
1838	72.5
1840	65
Jan. 1, 1842	42.5
July 5, 1842	20

This calculation is on the basis of the prices of 1833. If prices changed

comparatively moderate; but in the six months from January 1 to July 1, 1842, the duty dropped from 65 to 20 per cent. Producers and dealers necessarily found it hard to deal with such changes. It is true that a long warning was given them; but, on the other hand, Congress might at any moment interfere to modify the act. Finally, and not least among the objections, there was the ultimate horizontal rate of 20 per cent.—a crude and indiscriminating method of dealing with the tariff problem, which can be defended on no ground of principle or expediency. The 20 per cent. rate, according to the terms of the act, was to remain in force indefinitely, that being the concession which in the end was made to the extremists of the South.[1]

As it happened, however, the 20 per cent. duty remained in force for but two months, from July 1 till September 1, 1842.[2] At the latter date the tariff act of 1842 went

(and they did change greatly), the rates under the Compromise Act would vary materially from those given in the text; since the *ad valorem* equivalent of the specific duty, and its excess over 20 per cent., were ascertained for each year according to the prices of that year.

[1] Clay, who drafted the act, probably had no expectation that the 20 per cent. rate ever would go into effect. He thought Congress would amend before 1842, and intended to meet by his compromise the immediate emergency only. See his "Works," vol. II., pp. 131, 132. He tried to show Appleton and Davis, two leading representatives of the protectionists, that "no future Congress would be bound by the act." See Appleton's speech on the Tariff Act of 1842, "Appendix to Cong. Globe," 1841–42, p. 575.

[2] The Compromise Act was so loosely constructed that doubt was entertained whether under its terms any duties at all could be collected after June 30, 1842. The point was carried before the Supreme Court, which decided, however, that the rate of 20 per cent. was in effect during the two

into force. That act was passed by the Whigs as a party measure, and its history is closely connected with the political complications of the time. The Whigs had broken with President Tyler, and had a special quarrel with him as to the distribution among the States of the proceeds of the public lands. Tyler vetoed two successive tariff bills because of clauses in them in regard to distribution. The bill which he finally signed, and which became law, was passed hurriedly, without the distribution clause. Attention was turned mainly to the political quarrel and to the political effect of the bill in general.[1] The act, naturally enough, was a hasty and imperfect measure, of which the details had received little consideration. The duties which it levied were high,—probably higher than they would have been had the tariff discussion been less affected by the breach between Tyler and the Whigs. Though distinctively protective, and proclaimed to be such by the Whigs, it had not such a strong popular feeling behind it as had existed in favor of the protective measures of 1824, 1828, and 1832. In the farming States the enthusiasm for the home-market idea had cooled perceptibly; and in the manufacturing States the agitation came rather from the producers directly interested than

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months before the act of 1842 went in force. (Aldridge *vs.* Williams, 3 Howard, 9.) Justice McLean dissented; and there is much force to his dissenting opinion and to the argument of Reverdy Johnson, the counsel against the government.

[1] A full account of this struggle is in Von Holst's "Constitutional History," vol. III., pp. 451–463.

from the public at large. There is much truth in Calhoun's remark that the act of 1842 was passed, not so much in compliance with the wishes of the manufacturers, as because the politicians wanted an issue.[1]

The act of 1842 remained in force for but four years. It was in turn superseded by the act of 1846, again a political measure, passed this time by the Democrats. The act of 1846 carried out the suggestions made by Secretary Walker in his much debated Treasury Report of 1845. Indeed, it may be regarded as practically framed by Walker, who professed to adhere to the principle of free trade; and the act of 1846 is often spoken of as an instance of the application of free-trade principles. In fact, however, it effected no more than a moderation in the application of protection. The act established several schedules, indicated by the letters A, B, C, D, and so on. All the articles classed in schedule A paid 100 per cent., all in schedule B paid 40 per cent., all in schedule C paid 30 per cent., and so on for the rest. Schedule C, with the 30 per cent. duty, included most articles with which the protective controversy is concerned,—iron and metals in general, manufactures of metals, wool and woollens, manufactures of leather, paper, glass, and wood. Cottons were in schedule D, and paid 25 per cent. Tea and coffee, on the other hand, were exempt from duty.

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[1] "Works," vol. IV., pp. 199, 200. Calhoun thought that a good deal was due also to the influence of the "moneyed men" who wanted the Treasury to be filled.

The act of 1846 remained in force till 1857, when a still further reduction of duties was made. The revenue was redundant in 1857, and this was the chief cause of the reduction of duties. The measure of that year was passed with little opposition, and was the first tariff act since 1816 that was not affected by politics.[1] It was agreed on all hands that a reduction of the revenue was imperatively called for, and, except from Pennsylvania, there was no opposition to the reduction of duties made in it. The framework of the act of 1846 was retained,—the schedules and the *ad valorem* duties. The duty on the important protective articles, in schedule C, was lowered to 24 per cent., cottons being transferred, moreover, to that schedule. Certain raw materials were at the same time admitted free of duty.

The act of 1857 remained in force till the close of the period we now have under examination. We begin with a high protective tariff in 1832; then follows a gradual reduction of duties, ending in 1842 with a brief period of very low duties. In the four years 1842–46 we have a strong application of protection. In 1846 begins what is often called a period of free trade, but is in reality one of moderated protection. In 1857 the protection is still further moderated, and for a few years there is as near an approach to free trade as the country has had since 1816.

[1] Seward said, in 1857, that "the vote of not a single Senator will be governed by any partisan consideration whatever." Appendix to "Congressional Globe," 1856–57, p. 344; and see Hunter's speech, *ibid.*, p. 331.

Turning now to the economic effect of this legislation, we have to note, first, its connection with the general prosperity of the country. That there was a distinct connection is asserted by both protectionists and free traders. The protectionists tell us that the compromise tariff caused the disastrous crises of 1837 and 1839; that the high tariff of 1842 brought back prosperity; that depression again followed the passage of the act of 1846, and that the panic of 1857 was precipitated by the tariff act of 1857. On the other hand, free traders not infrequently describe the period between 1846 and 1860 as one of exceptional prosperity, due to the low duties then in force.

It would not be worth while to allude to some of these assertions, if they were not so firmly imbedded in current literature and so constantly repeated in many accounts of our economic history. This is especially the case with the curious assertion that the crises of 1837 and 1839 were caused by the compromise tariff of 1833, or connected with it. This assertion had its origin in the writings of Henry C. Carey, who has been guilty of many curious versions of economic history, but of none more remarkable than this. It may be found in various passages in his works; and from them it has been transferred to the writings of his disciples and to the arguments of protectionist authors and speakers in general.[1] Yet no fair-

[1] References to the supposed effects of the act of 1833 abound in Carey's works. As good a specimen as any is this: "Agitation succeeded in producing a total change of system in the tariff of 1833. * * * Thencefor-

minded person, having even a superficial knowledge of the economic history of these years, can entertain such notions. The crises of 1837 and 1839 were obviously due to quite a different set of causes—to the bank troubles, the financial mistakes of Jackson's administration, the inflation of the currency, and to those general conditions of speculation and unduly expanded credit which give rise to crises. The tariff act had nothing whatever to do with them. Indeed, the reductions in duty under it, as we have

ward the building of furnaces and mills almost wholly ceased, the wealthy English capitalists having thus succeeded in regaining the desired control of the great American market for cloth and iron. As a consequence of their triumph there occurred a succession of crises of barbaric tendency, the whole terminating, in 1842, in a scene of ruin such as had never before been known, bankruptcy among the people being almost universal," etc. "Letters on the Iron Question" (1865), p. 4, printed in his "Miscellaneous Works" (1872). To the same effect, see his "Financial Crises," p. 18; "Review of Wells' Report," p. 5; "Social Science," II., p. 225. Professor Thompson makes the same statement in his "Political Economy," p. 353. See also Elder, "Questions of the Day" (1871), pp. 200, 201. Senator Evarts, in a speech made in 1883, ascribed to the act of 1833 "a bankruptcy which covered the whole land, without distinction of sections, with ruin." The pedigree of statements of this kind, which are frequent in campaign literature, can be traced back to Carey. Doubtless Carey wrote in good faith; but his prejudices were so strong as to prevent him from taking a just view of economic history.

Oddly enough, Calhoun ascribed the crisis of 1837 to the fact that duties under the act of 1833 remained *too high*. The high duties brought in a large revenue and caused a surplus in the Treasury; the deposit and distribution of this brought inflation and speculation, and eventually a crisis ("Works," IV., p. 174). No doubt the high duties were one cause of the government surplus, and thereby aided in bringing about the crisis, so that this view, incomplete as it is, has more foundation than Carey's explanation. On the other hand, Clay, as might be expected, took pains to deny that the act of 1833 had any thing to do with the troubles of the years following its passage ("Works," II., pp. 530, 531; edition of 1844).

seen, were slight until 1840, and could hardly have influenced in any degree the breaking out of the panics. Even if the reductions of duty had been greater, and had been made earlier, they would probably have had no effect, favorable or unfavorable, on the inflation of the earlier years or on the depression which followed.

We may dispose at this point of a similar assertion occasionally made in regard to the crisis of 1857,—that the tariff act of 1857 caused or intensified it. This view also is traceable, probably, to Carey. It appears in his writings and in those of his disciples.[1] In fact, the crisis of 1857 was an unusually simple case of activity, speculation, over-banking, panic, and depression; and it requires the exercise of great ingenuity to connect it in any way with the tariff act. As it happened, indeed, the tariff was passed with some hope that it would serve to prevent the crisis. Money was accumulating in the Treasury; and it was hoped that by reducing duties the revenue would be diminished, money would be got out of the Treasury, and the stringency, which was already threatening, prevented.[2]

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[1] Carey speaks in one place of "the terrific free-trade crisis of 1857." "Letters to Colfax," p. 15; "Financial Crises," p. 8; "Review of Wells," p. 5 (all in his "Miscellaneous Works"). Thompson ("Political Economy," p. 357) says: "In 1857, Congress reduced the duties twenty-five per cent. * * * It at once intensified all the unwholesome tendencies in our commercial and industrial life. * * * Another great panic followed through the collapse of unsound enterprises."

[2] See a letter from a Boston merchant to Senator Wilson, "Congr. Globe, 1856–57, Appendix," p. 344; and the statement by Senator Hunter, *ibid.*, 329.

The reduction failed to prevent the panic; but, at the time, it would have been considered very odd to ascribe the disaster to the tariff act.

On the other hand, it has been very often said that the activity of trade in 1843–44 was due to the enactment of the protective tariff act of 1842. There may be a degree of truth in this. The unsettled state of legislation on the tariff before the act of 1842 was passed must have been an obstacle to the revival of confidence. After July 1, 1842, there was the uniform duty of 20 per cent.; nay, it was doubtful whether there was by law even that duty in force. It was certain that Congress would wish not to retain the horizontal rate, but would try to enact a new tariff law; yet the quarrel between the Whigs and Tyler made the issue quite doubtful. Such uncertainty necessarily operated as a damper on trade; and the passage of any act whatever, settling the tariff question for the time being, would have removed one great obstacle to the return of activity and prosperity. It is even possible that the passage of the act of 1842 may have had a more direct effect than this. No doubt, in the regular recurrence of waves of activity and depression, the depression of 1840–42 would soon have been followed, in any event, by a period of activity. The point at which activity will begin to show itself under such circumstances is largely a matter of chance. It begins, for some perhaps accidental reason, with one industry or set of idustries, and, the materials for general revival being ready, then spreads

quickly to the others. In the same way, when the materials for a crisis are at hand, a single accidental failure may precipitate a general panic. In 1842–43 the high duties of the tariff act probably helped to make profits large for the time being in certain manufactures, notably those of cotton and iron. Prosperity in these set in, and may have been the signal for a general revival of confidence and for a general extension of business operations. To that extent, it is not impossible that the protective tariff of 1842 was the occasion of the reviving business of the ensuing years. But it is a very different thing from this to say that the tariff was the cause of prosperity, and that depression would have continued indefinitely but for the re-establishment of high protective duties.

In truth, there has been a great deal of loose talk about tariffs and crises. Whenever there has been a crisis, the free traders or protectionists, as the case may be, have been tempted to use it as a means for overthrowing the system they opposed. Cobden found in the depression of 1839–40 a powerful argument in his crusade against the corn laws, and knew that a return of prosperity would work against him.[1] Within a few years, the opponents of protection in this country have found in general depression a convenient and effective argument against the tariff. In the same way, the protectionists have been tempted to use the crises of 1837 and 1857, and conversely

[1] See passages in Morley's "Life of Cobden," pp. 162, 163, 210.

the revival of 1843–44, to help their case. But the effect of tariffs cannot be traced by any such rough-and-ready method. The tariff system of a country is but one of many factors entering into its general prosperity. Its influence, good or bad, may be strengthened or may be counteracted by other causes; while it is exceedingly difficult, generally impossible, to trace its separate effect. Least of all can its influence be traced in those variations of outward prosperity and depression which are marked by "good times" and crises. A protective tariff may sometimes strengthen other causes which are bringing on a commercial crisis. Some such effect is very likely traceable to the tariff in the years before the crisis of 1873. It may sometimes be the occasion of a revival of activity, when the other conditions are already favorable to such a revival. That may have been the case in 1843. But these are only incidental effects, and lie quite outside the real problem as to the results of protection. As a rule, the tariff system of a country operates neither to cause nor to prevent crises. They are the results of conditions of exchange and production on which it can exercise no great or permanent influence.

Remarks of the same kind may be made on the frequent assertion that the prosperity of the country from 1846 to 1860 can be traced to the low duties then in force. He who is convinced, on grounds of general reasoning and of general experience, that the principles of

free trade are sound and that protective duties are harmful, can fairly deduce the conclusion that the low tariffs of 1846 and 1857 contributed, so far as they went, to general prosperity. But a direct connection cannot be traced. A number of favorable causes were at work, such as the general advance in the arts, the rapid growth of the railway system and of ocean communication, the Californian gold discoveries. There is no way of eliminating the other factors, and determining how much can be ascribed to the tariff alone. Even in the growth of international trade, where some direct point of connection might be found, we cannot measure the effect of low duties; for international trade was growing between all countries under the influence of cheapened transportation and the stimulus of the great gold discoveries.[1] The inductive, or historical, method absolutely fails us here.

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[1] The growth of foreign trade under the tariffs of 1846 and 1857 was certainly very striking. In Grosvenor's "Does Protection Protect?" there is a table showing the imports and exports per head of population from 1821 to 1869, in which it is stated that the annual average per head of population was :

	Imports.	Exports.
In 1843–46,	$4.66	$5.22
" 1847–50,	6.35	6.32
" 1851–55,	9.10	7.35
" 1856–60,	10.41	9.45

The imports and exports were, in millions of dollars :

	Imports.	Exports.
Annual average of the four years 1843–46,	92.7	100
" " " " " " 1847–50,	138.3	136.8
" " " " five " 1851–55,	231.	186.2
" " " " " " 1856–60,	305.	278.2

But how are we to measure the share which low duties had in promoting this growth?

We turn now to another inquiry, as to the effect of the fluctuating duties of this period on the protected industries. That inquiry, it is hardly necessary to say, leads us to no certain conclusion as to the effect of the duties on the welfare of the country at large. It is quite conceivable, and indeed on grounds of general reasoning at least probable, that any stimulus given to the protected industries indicated a loss in the productive powers of the community as a whole. But it has often been asserted, and again often denied, that the duties caused a growth of certain industries; and it is worth while to trace, if we can, the tangible effect in this direction, even though it be but a part of the total effect.

It is the production of iron in the unmanufactured form that has been most hotly discussed in the protective controversy. And in regard to this, fortunately, we have good, if not complete, information.

The duty on pig-iron had been 62½ cents a hundredweight under the tariff act of 1828. In 1832 it was reduced to 50 cents, or $10 per ton. This rate was equivalent to about 40 per cent. on the foreign price at that time; and, under the Compromise Act of 1833, it was gradually reduced, until it reached 20 per cent. in 1842. Under the act of 1842, the duty was again raised to $10 a ton. In 1846 it was made 30 per cent. on the value, and in 1857 24 per cent. As the value varied, the duty under the last two acts varied also. In 1847, a time of high prices, the duty of 30 per cent. was equal to $5.75 per

ton; in 1852 it was only $3.05; in 1855 it was as high as $6; in 1860 it again fell to $3.40.[1]

The duty on bar-iron was of two kinds until 1846,—a duty on hammered bar-iron, and another heavier duty on rolled bar-iron. The duty on hammered bar was, in 1832, fixed at 90 cents per hundredweight, or $18 per ton. That on rolled bar was nearly twice as heavy, being $30 per ton, or nearly 100 per cent. on the value. These duties were reduced under the Compromise Act; and, as we have seen, the reduction on rolled bar was very great, and, in 1842, very sudden. Under the act of 1842, the duty on hammered bar was made $17 per ton, that on rolled bar $25 per ton. The act of 1846 gave up finally the discrimination between the two kinds, and admitted

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[1] The duty from year to year, on the average, for the fiscal years ending June 30th, is given in the following table. The foreign value, on which the duty was computed, is also given. The figures are compiled from the tables given in French, "History of Iron Manufacture," p. 70, and in the "Report of the Iron and Steel Association for 1876," p. 182.

Year ending June 30th.	Average value.	Duty (30 per cent. till 1857, 24 per cent. after 1857.)
1847	$19.90	$5.95
1848	15.80	4.75
1849	13.30	4.00
1850	12.70	3.80
1851	12.60	3.75
1852	10.20	3.05
1853	13.40	4.00
1854	18.00	5.40
1855	20.00	6.00
1856	19.80	5.95
1857	19.50	5.85
1858	17.60	4.20
1859	15.20	3.65
1860	14.10	3.40

both alike at a duty of 30 per cent.; and the act of 1857 admitted them at 24 per cent.[1]

Before proceeding to examine the economic effect of these duties, it should be said that our information as to the production of iron is in many ways defective, and that the statements relating to it in the following paragraphs cannot be taken to be more than roughly accurate. The government figures give us trustworthy information as to the imports; but for the domestic production we must rely, at least for the earlier years, on estimates which are often no more than guesses. Nevertheless, the general trend of events can be made out pretty clearly, and we are able to draw some important conclusions.[2]

It seems to be clear that the importation of iron was somewhat affected by the duties. The years before 1842, when the compromise tariff was in force, were years of such disturbance that it is not easy to trace any effects clearly to the operation of the tariff; but imports during these years were a smaller proportion of the total consumption of iron than they were during the period after

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[1] Between 1832 and 1842, an exception had been made for one class of rolled iron,—iron rails actually laid down on railroads. These were admitted free of duty; or, rather, a drawback was granted of the full amount of duty due or paid on them. Between 1828 and 1832, a drawback had been granted such as to make the duty on railroad iron only 25 per cent. After 1842, however, it was charged with duty like any other iron.

[2] The reader who wishes to examine further the data as to the production of iron before 1860, is referred to the Appendix to the *Quarterly Journal of Economics* for April, 1888, vol. II., pp. 377–382, where I have considered the figures in detail.

1846. It must be remembered that from 1830 till 1842 all railroad iron was admitted free of duty, and that a large part of the imported iron consisted of rails. If this quantity be deducted from the total import, the remaining quantity, which alone was affected by the duties, becomes still smaller as compared with the domestic product. In 1841 and 1842, when duties began to be low under the operation of the Compromise Act, imports were larger in proportion to the home product. On the other hand, in the four years, 1843–46, under the act of 1842, they show a distinct decrease. After 1847, they show as distinct an increase, and continue to be large throughout the period until 1860. In the speculative and railroad-building years, from 1852 to 1857, the importation was especially heavy; and in 1853 and 1854 the total quantity of iron imported was almost as great as the home product.

The most effective part of the iron duties until 1846 was the heavy discriminating duty on rolled bar-iron. That duty amounted (from 1818 till 1846, except during a few months in 1842) to about 100 per cent. Rolled iron, made by the puddling process and by rolling, is the form of bar-iron now in common use. The process was first applied successfully by Cort in England about 1785, and in that country was immediately put into extensive use. It made bar-iron much more cheaply and plentifully than the old process of refining in a forge and under a hammer; and, at the present time, hammered bar of the old-fashioned kind has ceased to be made, except in com-

paratively small quantities for special purposes. Cort's processes of puddling and rolling were practicable only through the use of bituminous coal and coke. The abundant and excellent coal of Great Britain gave that country an enormous advantage in producing rolled iron, as it had already done in smelting pig-iron, and put her in that commanding position as an iron producer which she continues to occupy to the present day. When rolled iron first began to be exported from England to foreign countries, it aroused strong feelings of jealousy, being so much cheaper than other iron. Several countries fought against the improvement by imposing discriminating duties on it.[1] That course was adopted in the United States. In 1818, a discriminating duty was put on rolled iron, partly because it was said to be inferior in quality to hammered iron, and partly from a feeling in favor of protecting the domestic producers of hammered iron. The duty was retained, as we have seen, till 1846. Its effect was neutralized in part by the free admission of railroad iron, which was one form of rolled iron; but, so far as it was applied to rolled iron in general, it simply prevented the United States from sharing the benefit of a great improvement in the arts. It had no effect in hastening the use of the puddling and rolling processes in the country. Though introduced into the United States as early as

[1] In France a discriminating duty equivalent to 120 per cent. was imposed in 1833 on iron imported by sea, *i. e.*, on English iron. Armé, "Tarifs de Douanes," I., 144, 145. The discrimination was maintained until 1855. *Ibid.*, 271.

1817, these processes got no firm hold until after anthracite coal began to be used, about 1840, as an iron-making fuel.[1]

We turn now to the history of the domestic production. By far the most important event in that history is the use of anthracite coal as a fuel, which began about 1840. The substitution of anthracite for wood (charcoal) revolutionized the iron trade in the United States in the same way as the use of bituminous coal (coke) had revolution-

[1] The first puddling and rolling mill in the United States was put up in Pennsylvania in 1817. The first puddling in New England was done as late as 1835. Wood was used as fuel at the outset. Swank, "Iron in All Ages," 166, 330. The effect of the duty on rolled iron cannot be better described than in the clear and forcible language used by Gallatin in 1831: "It seems impracticable that iron made with charcoal can ever compete with iron made from bituminous coal. * * * A happy application of anthracite coal to the manufacture of iron, the discovery of new beds of bituminous coal, the erection of iron-works in the vicinity of the most Easterly beds now existing, and the improved means of transportation, which may bring this at a reasonable rate to the sea-border, may hereafter enable the American iron-master to compete in cheapness with foreign rolled iron in the Atlantic districts. On those contingencies the tariff can have no effect. To persist, in the present state of the manufacture, in that particular competition, and for that purpose to proscribe the foreign rolled iron, is to compel the people for an indefinite time to substitute a dear for a cheap article. It is said that the British iron is generally of inferior quality; this is equally true of a portion of that made in America. In both cases the consumer is the best judge,—has an undoubted right to judge for himself. Domestic charcoal iron should confine itself to a competition with the foreign iron made from the same fuel." Gallatin added, prophetically: "Your memorialists believe that the ultimate reduction of the price of American iron to that of British rolled iron can only, and ultimately will, be accomplished in that Western region which abounds with ore, and in which are found the most extensive formations of bituminous coal."—"Memorial of the Free-Trade Convention," pp. 60, 61.

ized the English iron trade nearly a century before. Up to 1840, pig-iron had been smelted in this country with charcoal, a fuel which was expensive, and tended to become more and more expensive as the nearer forests were cut down and wood became less easily attainable. Charcoal pig-iron could not have competed on even terms with the coal-made English iron. But between 1830 and 1840 it was protected by the heavy duties on English iron; and, under their shelter, the production in those years steadily increased. There seems to be no doubt that, with lower duties or no duties at all, the domestic production would have been less, and the import greater. In other words, the duty operated as a true protective duty, hampering international trade and increasing the price of the home product as well as of the imported iron.

In 1840, however, anthracite coal began to be applied to the making of pig-iron. The use of anthracite was made possible by the hot blast,—a process which was put in successful operation in England at nearly the same time.[1] The importance of the new method was immediately appreciated, and predictions were made that henceforth there would be no longer occasion for importing iron, even under the 20 per cent. duty of the Compromise Act. Many furnaces were changed from the charcoal to the

[1] The hot blast was successfully applied in a furnace in Pennsylvania in 1835, but the experiment was not prosecuted. In 1837, Crane applied it in Wales, and about the same time the process was successfully used in this country. Swank, "Iron in All Ages," 268–273; French, "History of the Iron Trade," 58–60.

anthracite method.[1] At very nearly the same time, as it happened, the tariff act of 1842 was passed, imposing heavy duties on all kinds of iron, among others on the railroad iron which had hitherto been admitted free. Very shortly afterwards a general revival of trade set in. Under the influence of these combined causes, the production of iron was suddenly increased. The exact amount of the increase is disputed; but the production seems to have risen from somewhere near 300,000 tons in 1840–41, to 650,000 or more in 1846–47. Some part of this great growth was certainly due to the high protection of 1842; but, under any circumstances, the use of anthracite would have given a great stimulus to the iron trade. This is shown by the course of events under the tariff acts of 1846 and 1857. The production remained, on the whole, fairly steady throughout the years when these acts were in force. There was, on the whole, an increase from between 500,000 and 600,000 tons in the earlier years of the period to between 800,000 and 900,000 tons in the later years. For a few years after the passage of the act of 1846, the reduction of the duty to 30 per cent. had little, if any, effect. Prices were high both in England and in the United States; for it was a time of active railroad building in England, and consequently of great demand for iron. The *ad valorem* duty was correspond-

[1] See the notices in Hazard's "Statistical Register," I., pp. 335, 368; III., p. 173; IV., p. 207. That great results were at once expected from the new method is shown by an interesting speech of Nicholas Biddle's, *ibid.*, II., p. 230.

ingly high. In 1850–51 the usual reaction set in, prices went down, production decreased, and the iron-masters complained.[1] But the natural revival came after a year or two. Prices rose again; production increased, and continued to increase until 1860. Although the duty, which had been $9 a ton under the act of 1842, was no more than $3 and $4 under the 24 per cent. rate which was in force during the years 1858, 1859, and 1860, and although these were not years of unusual general activity, the domestic production showed a steady growth. The country was growing fast, many railroads were in course of construction, much iron was needed. An undiminished home product was consumed, as well as largely increased imports.

The most significant fact in the iron trade, however, is to be seen, not in the figures of total production, but in the shifting from charcoal to anthracite iron. While the total product remained about the same, the component elements changed greatly. The production of anthracite

[1] The iron-masters admitted that the act of 1846 had been sufficiently protective when first passed. But in 1849 and 1850, they began to complain and ask for higher duties. See "Proceedings of Iron Convention at Pittsburg (1849)," p. 9; "Proceedings of Convention at Albany," pp. 27, 42. They certainly had a legitimate subject for complaint in the operation of the *ad valorem* duty, in that it tended to exaggerate the fluctuations of prices. When prices abroad were high, the duty was high; when prices abroad were low, the duty was low. Consequently, the price of foreign iron in the United States, which is the sum of the foreign price and the duty, fluctuated more widely than the foreign price alone. This was certainly an evil, especially with an article whose price was liable under any conditions to vary so much as the price of iron. See the table above, p. 124.

iron rose steadily: that of charcoal iron fell as steadily. The first anthracite furnace was built in 1840. In 1844 there were said to be twenty furnaces, making 65,000 tons annually.[1] Thence the production rose with hardly an interruption being

in 1844	. . . .	65,000 gross tons.
" 1846	. . . .	110,000 " "
" 1849	. . . .	115,000 " "
" 1854	. . . .	308,000 net "
" 1855	. . . .	343,000 " "
" 1856	. . . .	394,000 " " [2]

As the anthracite iron production increased, that of charcoal iron decreased. Under the tariff act of 1842, a large number of new charcoal furnaces had been put up.[3] Many of these had to be given up under the combined competition of anthracite and of English iron. Some maintained themselves by using coke and raw bituminous coal, in those parts of the country where bituminous coal was to be had[4]; others disappeared. That at least some

[1] See a "Letter of the Philadelphia Coal and Iron Trade to the Committee on Finance" (pamphlet, Philadelphia, 1844).

[2] The figure for 1846 is that given in Taylor, "Statistics of Coal," p. 133. Swank gives the figure for 1846 as 123,000 (gross?) tons. "Iron in All Ages," p. 274. The figures for 1849–56 are from Lesley, "Iron Manufacturers' Guide (1859)," pp. 751,752. Those given by Grosvenor, "Does Protection Protect?" p. 225, vary somewhat; but the differences are not great.

[3] See the figures in Grosvenor, p. 215. There were built in 1843 9 charcoal furnaces; in 1844, 23; in 1845, 35; in 1846, 44; in 1847, 34; in 1848, 28; in 1849, 14.

[4] The use of coke began in the United States about 1850, but was of little importance until after 1856. The use of raw bituminous coal was introduced about 1850 in the Shenango and Mahoning valleys (on the border

of them should disappear was inevitable. Charcoal iron for general use was a thing of the past; and the effect of the tariff of 1842 was to call into existence a number of furnaces which used antiquated methods, and before long must have been displaced in any event by anthracite furnaces

The use of anthracite not only stimulated the production of pig-iron, but also that of rolled iron and railroad bars. Anthracite was first used in puddling and reheating in 1844 and 1845,[1] and thenceforward rolled iron was made regularly in large quantities. In 1856 the production of rolled iron was nearly 500,000 tons.[2] Iron rails first began to be made while the tariff act of 1842 was in force, though the steps towards making them were taken even before that act put an end to the free admission of English rails.[3] With the decline in railroad building and the

between Pennsylvania and Ohio), where there is suitable coal. Swank, "Iron in All Ages," pp. 281–284. In the "Report of the American Iron and Steel Association for 1876" (prepared by Swank), the following figures are given of the production of iron with the various kinds of fuel. I have selected a few typical years:

Year.	Anthracite iron.	Charcoal iron.	Bituminous coal and coke iron.	Total.
1854	339,000	342,000	55,000	736,000
1856	443,000	370,000	70,000	883,000
1858	362,000	285,000	58,000	705,000
1860	519,000	278,000	122,000	919,000

The figures here denote net tons.

[1] Speech of A. S. Hewitt, in "Proceedings of Iron Convention at Albany" (1849), p. 54.

[2] Lesley, "Iron Manufacturers' Guide," p. 761.

[3] See a pamphlet, "Observations on the Expediency of Repealing the Act by which Railroad Iron is Released from Duty," 1842. It gives an account of large rolling mills then being erected at Danville, Pennsylvania.

general fall in iron prices, which took place in 1849, many of the rail mills stopped work. But the business revived with the general prosperity which set in early in the decade, and the production of rails steadily increased until 1856. Under the influence of the crisis of 1857 it fell, but soon rose again, and in 1860 was more than 200,000 tons.[1]

To sum up: The high duty on iron in its various forms between 1832 and 1841, and again in 1842–46, impeded importation, retarded for the United States that cheapening of iron which has been one of the most important factors in the march of improvement in this century, and maintained in existence costly charcoal furnaces long after that method had ceased in Great Britain to be in general use. The first step towards a vigorous and healthy growth of the iron industry was in the use of anthracite in 1840. That step, so far from being promoted by the high duties, was taken in a time when duties were on the point of being reduced to the 20 per cent. level. Hardly had it been taken when the high duties of the tariff act of 1842 brought about (not indeed alone, but in conjunction with other causes) a temporary return to the

[1] See the figures given in "Report of Iron and Steel Association for 1876," p. 165. The production of rails is there stated to have been:

In 1849	24,000	tons.
" 1850	44,000	"
" 1854	108,000	"
" 1856	180,000	"
" 1857	162,000	"
" 1860	205,000	"

old charcoal process. A number of new charcoal furnaces were built, unsuited to the industry of the time and certain to succumb before long. Under the lower duties from 1846 to 1860, the charcoal production gradually became a less and less important part of the iron industry, and before the end of the period had been restricted to those limits within which it could find a permanent market for the special qualities of its iron.[1] On the other hand, the lower duties did not prevent a steady growth in the making of anthracite iron; while the production of railroad iron and of rolled iron in general, also made possible by the use of anthracite, showed a similar steady progress. There is no reason to doubt that, had there been no duty at all, there would yet have been a large production of anthracite pig- and rolled iron. Meanwhile the country was rapidly developing, and needed much iron. The low duties permitted a large importation of foreign iron, in addition to a large domestic production. The comparative cheapness and abundance of so important an industrial agent could not have operated otherwise than to promote material prosperity.

We turn now to another industry,—the manufacture of cotton goods, by far the largest and most important branch of the textile industry. Here we are met at the

[1] Charcoal iron has qualities which cause a certain quantity of it to be in demand under any circumstances. Since it settled down, about 1860, to its normal place as a supplement to coal-made iron, the product has steadily increased with the growing needs of the country. In the years 1863–65 the annual product was about 240,000 tons. In 1886 it was 460,000 tons.

outset by the fact that, at the beginning of the period which we are considering, the cotton manufacture was in the main independent of protection, and not likely to be much affected, favorably or unfavorably, by changes in duties. Probably as early as 1824, and almost certainly by 1832, the industry had reached a firm position, in which it was able to meet foreign competition on equal terms.[1] Mr. Nathan Appleton, who was a large owner of cotton factory stocks, and who was also, in his time, one of the ablest and most prominent advocates of protective duties, said in 1833 that at that date coarse cottons could not have been imported from England if there had been no duty at all, and that even on many grades of finer goods competition was little to be feared. In regard to prints, the American goods were, quality for quality, as cheap as the English, but might be supplanted, in the absence of duties, by the poorer and nominally cheaper English goods,—an argument, often heard in our own day, which obviously puts the protective system on the ground of regulating the quality of goods for consumers. The general situation of the cotton manufacture, as described by Appleton, was one in which duties had ceased to be a factor of much importance in its development.[2]

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[1] See the previous essay on "Protection to Young Industries," Part III., where an account is given of the history of the cotton manufacture up to 1824.

[2] See Appleton's speech on the Verplanck bill of 1833, "Congressional Debates," IX., pp. 1216–1217. Compare his remarks in the same volume at p. 1579.

During the extraordinary fluctuations of industry and the gradual reduction of duties which ensued under the compromise tariff of 1833, the business of manufacturing cottons was profitable and expanded, or encountered depression and loss, in sympathy with the industry of the country at large, being influenced chiefly by the expansion of credit and the rise of prices before 1837 and 1839, and the crisis and liquidation that followed those years. Notwithstanding the impending reductions of duty under the Compromise Act, large investments were made in the business in the earlier part of the period. Thus, in 1835–36, the Amoskeag Company began on a large scale its operations in Manchester, N. H.[1] The depression at the close of the decade checked growth for a while, but did not prevent new investments from being made, even before the passage of the act of 1842 settled the tariff uncertainty.[2] The best informed judges said that the causes of increase or decrease of profit had been, as one might expect, the same as those that produced fluctuations in other branches of business; and they made no mention of duties or of tariff.[3] Appleton's account of the

[1] Potter, "History of Manchester," p. 552. The Stark Mills were built in 1838, the second Stark Mills in 1839.

[2] Earl, "History of Fall River," pp. 35–37. "From the panic of 1837, which affected every business centre in the country, Fall River seems to have speedily recovered, since within a few years from that date nearly every mill in the place was enlarged, though only one new one was built." *Ibid.*, p. 53.

[3] See the answers from T. G. Cary, treasurer of a Lowell mill, and from Samuel Batchelder to circulars sent out in 1845 by Secretary Walker. Batch-

stage reached by the industry finds confirmation in a careful volume on the cotton manufacture in the United States, published in 1840 by Robert Montgomery. This writer's general conclusions are much the same as those which competent observers reach for our own time. Money wages were about twice as high in the United States, but the product per spindle and per loom was considerably greater. The cotton, in his time, was not so well mixed, not so thoroughly cleaned, not so well carded in the United States as in England; but, on the other hand, the Americans were superior in ordinary power-loom weaving, as well as in warping and dressing. Elaborate tables are given of the expenses per unit of product in both countries, the final result of which, when all things were considered, showed a difference of three per cent. in favor of the American manufactures. Calculations of this kind, which are common enough in discussions of protective duties, are apt to express inadequately the multiplicity of circumstances which affect concrete industry; yet they may gauge with fair accuracy the general conditions, and in this case were made intelligently and without bias. It is worth noting that Montgomery attributes the success of the Americans in exporting cottons to

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elder, our most trustworthy informant on the early history of the cotton manufacture, writes that "the increase and decrease of profit from 1831 to 1844 have conformed very nearly to the general prosperity of the country." The circulars and answers are printed in the appendices to Walker's Report. Exec. Doc. 1845–46, vol. II., No. 6, pp. 215, 216, 313.

greater honesty in manufacturing and to the superior quality of their goods.[1]

During the years following the passage of the act of 1842, by which the duties on cottons were increased largely, the manufacturers made high profits. In Secretary Walker's Report, and in other attacks on protective duties, much was made of this circumstance, the high profits being ascribed to the new duties. The protectionists denied the connection, and a lively controversy ensued.[2] The truth seems to be that the case was not different from that usually presented in economic phenomena,—several causes combined to produce a single general effect. The high duties very likely served, in part, to enable a general advance of profits to be maintained for several years. But there was also an increased

[1] See "Montgomery's "Cotton Manufacture," pp. 29, 38, 82, 86, 91, 101. The tables of expenses are on pp. 124, 125; the remarks on quality of goods, on pp. 130, 194; on wages and product, on pp. 118–121, 123. Montgomery was superintendent of the York Factories at Saco, Maine, of which Samuel Batchelder was treasurer. Allusions to Montgomery's book, and confirmation of some of his conclusions, may be found in Batchelder's "Early Progress of the Cotton Manufacture," p. 80 and following.

At a convention in favor of protection, held in New York in 1842, committees were appointed on various industries. The committee on cottons reported a recommendation to Congress of minimum duties on plain and printed goods, but added that these duties were "more than is necessary for much the largest part of the cotton goods," and that "most of the printed calicoes are now offered to the consumer at lower prices than they could be imported under a tariff for revenue only."

[2] See T. G. Cary, "Results of Manufactures at Lowell," Boston, 1845; N. Appleton, "Review of Secretary Walker's Report," 1846; and the speeches of Rockwell, "Congr. Globe," 1845–46, pp. 1034–1037, and Winthrop, *ibid.*, Appendix, p. 969.

export to China, which proved highly profitable. Moreover, the price of raw cotton was low in these years, lagging behind the advance in the prices of cotton goods; and, as long as this lasted, the manufacturers made large gains. The fact that prosperity was shared by the cotton manufacturers in England shows that other causes than the new tariff must have been at work.

On the other hand, when the act of 1846 was passed, the protectionists predicted disaster[1]; but disaster came not, either for the country at large or for the cotton industry. Throughout the period from 1846 to 1860 the manufacture of cotton grew steadily, affected by the general conditions of trade, but little influenced by the lower duties. Exact figures indicating its fortunes are not to be had, yet we have enough information to enable us to judge of the general trend of events. The number of spindles in use gives the best indication of the growth of cotton manufacturing. We have no trustworthy figures as to the number of spindles in the whole country; but we have figures, collected by a competent and well-informed writer, in regard to Massachusetts. That State has always been the chief seat of the cotton manufacture, and its progress there doubtless indicates what took place in the country at large. The number of spindles in Massachu-

[1] Abbott Lawrence predicted in 1849 that "all this [a general crash] will take place in the space of eighteen months from the time this experimental bill goes into operation; not a specie-paying bank doing business will be found in the United States." "Letters to Rives," p. 12. Appleton made a similar prediction in his "Review of Walker's Report," p. 28.

setts, which was, in round numbers, 340,000 in 1831, had nearly doubled in 1840, was over 800,000 in 1845, and was over 1,600,000 in 1860, having again nearly doubled during the period of low duties.[1] The same signs of growth and prosperity are seen in the figures of the consumption of raw cotton in the United States, which, compiled independently, reach the same general result. Between the first half of the decade 1840–50, and the second half of the decade 1850–60, the quantity of raw cotton used in the mills of the United States about doubled. The annual consumption, which had been about 150,000 bales in 1830, rose to an average of more than 300,000 bales in the early years of the next decade, and again to one of more than 600,000 bales in the years 1850–54. In the five years immediately preceding the civil war, the average annual consumption was about

[1] The following figures are given by Samuel Batchelder in a "Report to the Boston Board of Trade," made in 1860 (published separately; the essential parts printed also in "Hunt's Merchants' Magazine," xlv., p. 14):

Spindles in Massachusetts:

In 1831	340,000	
" 1840	624,500	(other sources make it 665,000).
" 1845	817,500	
" 1850	1,288,000	
" 1855	1,519,500	
" 1860	1,688,500	

For New England, and the United States as a whole, Batchelder gives the following figures, taken from De Bow, for the years 1840 and 1850. They are not entirely trustworthy, but may be accepted as roughly accurate. We add the census figures for 1860:

	Spindles in New England.	Spindles in United States.
1840	1,597,000	2,112,000
1850	2,751,000	3,634,000
1860	3,859,000	5,236,000

800,000 bales. During these years the consumption of cotton in Great Britain seems to have increased at very nearly the same rate.[1] Such figures indicate that the cotton manufacture was advancing rapidly and steadily. Another sign of its firm position is the steady increase during the same period in the exports of cotton goods, chiefly to China and the East. The value of the cotton goods exported averaged but little over $3,000,000 annually between 1838 and 1843, rose to over $4,000,000 between 1844 and 1849, was nearly $7,000,000 a year between 1851 and 1856, was over $8,000,000 in 1859, and almost touched $11,000,000 in 1860. An industry which regularly exports a large part of its products can hardly be stimulated to any considerable extent by protective duties. No doubt, the absence of high duties had an effect on the range of the industry. It was confined mainly to the production of plain, cheap, staple cotton cloths, and was not extended to the making of finer and "fancy" goods. But, even under the high protective duties of the last twenty-five years, the bulk of the product has continued to be of the first mentioned kind, and cottons of that grade have been sold, quality for quality, at prices not above those of foreign goods; while comparatively little progress has been made in the manufacture of the finer grades.[2]

[1] The reader is referred to the Appendix to the *Quarterly Journal of Economics* for April, 1888, for tables of the consumption of cotton and of the exports of cotton goods.

[2] Batchelder, who was a decided advocate of proctection, wrote in 1861 a

The situation of the woollen manufacture differs in some important respects from that of the cotton manufacture, most noticeably in that it is less favorable as regards the supply of raw material. The maker of cotton goods is sure of securing at home cotton of the best quality at a price below that which his foreign rival must pay. But many qualities of wool cannot be produced to advantage in the United States; while others cannot be grown at all, or at least, notwithstanding very heavy protective duties, never have been grown. Moreover, the raw material, when obtained, is neither so uniform in quality nor so well adapted to treatment by machinery as is the fibre of cotton. Wool is of the most diverse quality, varying from a fine silk-like fibre to a

series of articles for the Boston *Commercial Advertiser*, in which, after comparing the prices and qualities of English and American shirtings, he said: "The inquiry may then be made, What occasion is there for a protective duty? The answer is: There would be none in the ordinary course of business. But there are sometimes occasions when * * * there has been a great accumulation of goods in the hands of manufacturers abroad, so that, if crowded on their market, it would depress the price of the usual supply of their customers at home. On such occasions, our warehouse system affords the opportunity, at little expense, to send the goods here, where they may be ready to be thrown on the market to be sold," etc.

In Ellison's "Handbook of the Cotton Trade," it is stated, at p. 29; "It is believed that, had it not been for the free-trade policy of Great Britain, the manufacturing system of America would at the present time have been much more extensive than it is; but the spinners and manufacturers of Lancashire can as yet successfully compete with those of Lowell, though for how long a time remains to be seen, for the latter are yearly gaining experience and improving their machinery, so that before long they will be able to compete with the old country, more especially should the executive [*sic*] abolish the present protective system adopted with respect to the import of cotton manufactures." This was written in 1858.

coarse hairy one. A process of careful sorting by hand must therefore be gone through before manufacture can begin. In some branches of the industry the qualities of the fibre, and those of the goods which are to be made from it, call for more of manual labor, and admit in less degree of the use of machinery, than is the case with the cottons; and it is a familiar fact, though one of which the true meaning has not often been grasped, that a need of resorting to direct manual labor in large proportion and a difficulty in substituting machinery, constitute, under conditions of freedom, an obstacle to the profitable prosecution of a branch of industry in the United States. But, on the other hand, certain qualities of wool are grown to advantage in the climate of this country and under its industrial conditions, especially strong merino wools of good though not fine grade, of comparatively short staple, adapted for the making of flannels, blankets, and substantial cloths. At the same time, machinery can be applied to making these fabrics with less difficulty than to the manufacture of some finer goods.

Our information in regard to the history of the woollen manufacture is even more defective than that on iron and cottons. For the period between 1830 and 1840 we have no information that is worth any thing. In 1840 the industry was confined to making satinets (a substantial, inexpensive cloth, not of fine quality), broadcloths, flannels, and blankets.[1] The tariff act of 1842 imposed on

[1] See a passage quoted from Wade's "Fibre and Fabric" in the Bureau of Statistics' "Report on Wool and Manufactures of Wool," 1887, p. xlvii.

woollen goods a duty of 40 per cent., and on wool one of three cents a pound plus 30 per cent. on the value. It is said that during the four years in which these rates were in force a stimulus was giving to the making of finer qualities of broadcloths, the development being aided by evasions of the *ad valorem* duty on wool.[1] The act, however, did not remain in force long enough to make it clear what would have been its permanent effect on the woollen manufacture. Whatever may have been the start made in these few years in making finer woollens, this branch of the industry, as is generally admitted, well-nigh disappeared under the duties of 1846. The tariff of that year imposed a duty of 30 per cent. on woollen goods in general; but flannels and worsteds were admitted at 25 per cent., and blankets at 20 per cent. On wool also the duty was 30 per cent. Under this arrangement of duties,—whether or not in consequence of it,—no development took place in those branches of the manufacture which needed wool that was subject to the 30 per cent. duty. The finest grades of woollens were not made at all. But the manufacture of cloths of ordinary quality (so-called cassimeres and similar goods), and that of blankets and flannels, continued to show a regular growth. The census figures are not of much value as accurate statistics, but there seems to be no reason for doubting that they prove a steady advance in the woollen manufac-

[1] Grosvenor. "Does Protection Protect?" p. 147; Introduction to the volume of the "Census of 1860" on Manufactures, p. xxxiii.

ture as a whole.[1] The growth was confined mostly to those branches which used domestic wool; but within these there was not only increase, but development. The methods of manufacture were improved, better machinery was introduced, and new kinds of goods were made.[2] It is a striking fact that the very high protective duties which were imposed during the civil war, and were increased after its close, have not brought the manufacture of woollen cloths to a position substantially different from that which had been attained before 1860. The description of the industry which the spokesman of the Asso-

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[1] The census figures on the woollen manufacture are:

	Capital. (In million dollars.)	Value of Product. (In million dollars.)	Hands Employed.
1840	15.7	20.	21,342
1850	26.1	43.5	34,895
1860	30.8	61.9	41,360

The figures for 1850 are exclusive of those relating to blankets; for 1860 are exclusive of those relating to worsteds.

[2] "Eighteen hundred and fifty saw the success of the Crompton loom at Lowell and Lawrence, on which were made a full line of Scotch plaids in all their beautiful colorings, as well as star twills, half-diamonds. * * * Up to that time fancy cassimeres had been made largely through the Blackstone Valley (in Rhode Island) on the Crompton and Tappet looms, as made by William Crompton. As early as 1846 the Jacquard was used at Woonsocket and Blackstone. From 1850 to 1860 fancy cassimeres made a rapid advance, and the styles ran to extremes far more than they have ever since." Wade's "Fibre and Fabric," as quoted above, p. xlviii.

According to the official "Statistical Information Relating to Certain Branches of Industry in Massachusetts," 1855, at pp. 573–575, woollen goods were made in 1855 in that State as follows:

Broadcloth to the value of	$ 838,000
Cassimeres to the value of	5,015,000
Satinets to the value of	2,709,000
Flannels and blankets to the value of . . .	3,126,000
Woollen yarns to the value of	386,000

ciation of Wool Manufacturers gave in 1884 is, in the main, applicable to its state in 1860. "The woollen manufacture of this country * * * is almost wholly absorbed in production for the masses. Nine tenths of our card-wool fabrics are made directly for the ready-made clothing establishments, by means of which most of the laboring people and all the boys are supplied with woollen garments. The manufacture of flannels, blankets, and ordinary knit goods—pure necessaries of life—occupies most of the other mills engaged in working up carded wool."[1]

Some outlying branches of the woollen manufacture, however, showed a striking advance during the period we are considering. The most noteworthy of these is the carpet manufacture, which received a great impetus from the application of newly-invented machinery. The power-loom for weaving ingrain carpets was invented in 1841 by Mr. E. B. Bigelow, and the more complicated loom for weaving Brussels carpets was first perfected by the same inventive genius in 1848.[2] The new machinery at

[1] Mr. John L. Hayes, in the "Bulletin of the Association of Wool Manufacturers," vol. xiv., p. 116. Mr. Hayes also states the woollen manufacture to be "capable of producing commodities of the highest luxury,—rich carpets, fine upholsteries, and superfine broadcloths"; but his description of other branches of the industry is similar to that quoted in the text on card-wool goods. "The dress goods manufactured are fabricates almost exclusively for the million, the women of the exclusive and fashionable classes supplying themselves mainly through French importations. The vast carpet manufacture of Philadelphia, larger than in any city of Europe, has its chief occupation in furnishing carpets for the more modest houses."

[2] See the sketch of Mr. Bigelow's career up to 1854, in "Hunt's Merchants Magazine," xxx., pp. 162-170.

once put the manufacture of carpets on a firm basis; and in its most important branches, the manufacture of ingrain and Brussels carpets, it became independent of aid from protective duties. A similar development took place in the manufacture of woollen hose. The knitting-frame had been invented in England as early as the sixteenth century, but had been worked only by hand. It was first adapted to machinery in the United States in 1831, and was first worked by machinery at Cohoes in New York in 1832. Other inventions followed; and a prosperous industry developed, which supplied the entire domestic market, and was independent of protective duties.[1] On the other hand, hardly more than a beginning was made before the civil war in the manufacture of worsted goods. In 1860 there were no more than three considerable factories engaged in making worsteds, and the imports largely exceeded the domestic product.[2] Some ex-

[1] See the account of the history of the manufacture of knit goods in the "Census of 1860," volume on Manufactures, pp. xxxix.–xlv. Compare the brief sketch by John L. Hayes in his address on "Protection a Boon to Consumers" (Boston, 1867), pp. 9–11. No attempt had been made before 1860, in the United States or elsewhere, to make knit goods of cotton.

[2] See the Introduction to the volume on Manufactures, "Census of 1860," pp. xxxvi.–xxxix.

From the figures of production in the "Census of 1860," and from those of imports in the "Report on Commerce and Navigation" for the fiscal year 1859–60, we have the materials for a comparison of the domestic and the foreign supply of the most important kinds of woollen goods. The figures are:

	Production, 1860.	Imports, 1859–60.
Woollens generally (including flannels, but not blankets, shawls, or yarns) . . .	$43,500,000	$13,350,000
Carpets, ...	7,860,000	2,200,000
Worsteds	3,700,000	12,300,000

planation of this state of things may be found in the comparatively low duty of 25 per cent. on worsteds under the tariff of 1846. Something was due to the fact that the worsted industry in England not only was long established, but was steadily improving its methods and machinery. But the most important cause, doubtless, was the duty of 30 per cent. on the long-staple combing wool, which then was needed for making worsted goods, and which physical causes have prevented from being grown to any large extent in the United States.

The greatest difference between the woollen industry as it stands to-day and as it stood before 1860 is in the large worsted manufacture of the present, which has grown up almost entirely since the wool and woollens act of 1867. The high duties undoubtedly have been a cause of this development, or at least were so in the beginning; but a further and important cause has been the great improvement in combing machinery, which has rendered it possible to make so-called worsted goods from almost any grade of wool, and has largely done away with the distinction between woollen and worsted goods. The result has been that the worsted makers, as well as the makers of woollens, have been able to use domestic wool; and it is in the production of goods made of such wool that the greatest growth of recent years has taken place.

The tariff act of 1857 reduced the duty on woollens to 24 per cent., but much more than made up for this by admitting wool practically free of duty. Wool costing

less than twenty cents at the place of exportation was admitted free, which amounted in effect to the exemption of almost all wool from duty. Moreover, dyestuffs and other materials were admitted free or at low rates. The free admission of wool from Canada, under the reciprocity treaty of 1854, had already been in force for three years.[1] The remission of duties on these materials explains the willingness with which the manufacturers in general acceded to the rearrangement of rates in 1857. In 1860, when the beginnings were made in re-imposing higher protective duties, it was admitted that no demand for such a change came from manufacturers.[2] The only exception was in the case of the iron-makers of Pennsylvania, who did not share in the benefits of the free list,

[1] Large quantities of combing wool were imported from Canada under the reciprocity treaty, and were used in making worsteds and carpets. In 1866, when the treaty was terminated, and high duties had been imposed on wool in general, the manufacturers pleaded hard for the continued free admission of Canada wool, though they were active in securing the general high duties of 1867 on wool and woollens. But they did not succeed in getting the Canada wools free. See the "Statement of Facts Relative to Canada Wools and the Manufacture of Worsteds," made by the National Association of Wool Manufacturers, Boston, 1866.

[2] Senator Hunter, who had been most active in bringing about the passage of the act of 1857, said, during the debate on the Morrill bill of 1860, "Have any of the manufacturers come here to complain or to ask for new duties? If they have, I am not aware of it, with the exception, perhaps, of a petition or two presented early in the session by the Senator from Connecticut. Is it not notorious that if we were to leave it to the manufacturers of New England themselves, to the manufacturers of hardware, textile fabrics, etc., there would be a large majority against any change? Do we not know that the woollen manufacture dates its revival from the tariff of 1857, which altered the duties on wool?" "Congressional Globe," 1859–60, p. 301. Cp. the note to p. 160, below.

and who opposed the reduction of 1857. So far as the manufacture of woollen goods was concerned, the changes of 1857, as might have been expected, served to stimulate the industry; and it grew and prospered during the years immediately preceding the civil war. A remission of duty on materials obviously operates in the first instance mainly to the advantage of producers and middle-men, and brings benefit to consumers only by a more or less gradual process. The experiment of free wool, with a moderate duty on woollens, was not tried long enough to make certain what would be its final results. It is not impossible that, as is often asserted by the opponents of duties on wool, the free admission of that material would have led in time to a more varied development of the woollen manufacture. On the other hand, it may be, in the case of woollens as in that of cottons, that the conditions in the United States are less favorable for making the finer qualities than for making those cheaper qualities to which the application of machinery is possible in greater degree, and for which, at the same time, the domestic wool is an excellent material. The test of experience under conditions of freedom could alone decide what are the real causes of the comparatively limited range of both of the great textile industries; but it is not improbable that general causes like those just mentioned, rather than the hampering of the supply of wool, account for the condition of the woollen manufacture. However that may be, it seems certain that the

practical remission of duty in 1857, whether or no it would in the long run have caused a wide development of the woollen manufacture, gave it for the time being a distinct stimulus; it seems to have had but little, if any, effect on the prices of domestic wool[1]; and it must have tended at the least to cheapen for the consumer goods made in whole or in part of foreign wool.

It would be possible to extend this inquiry farther,[2] but enough has been said for the present purpose. In the main, the changes in duties have had much less effect on the protected industries than is generally supposed. Their growth has been steady and continuous, and seems to have been little stimulated by the high duties of 1842, and little checked by the more moderate duties of 1846 and 1857. Probably the duties of the last-mentioned years, while on their face protective duties, did not have in any important degree the effect of stimulating indus-

[1] The price per pound of medium wool, averaged from quarterly quotations, was:

	cts.		cts.
In 1852 . .	38½	In 1856 . .	45
" 1853 . .	53	" 1857 . .	46
" 1854 . .	42½	" 1858 . .	36
" 1855 . .	38	" 1859 . .	47
		" 1860 . .	47½

The prices of other grades moved similarly. The panic of 1857 caused a fall in 1858, but in the following year the old level was recovered. The figures are based on the tables of wool prices in the Bureau of Statistics' "Report on Wool and Manufactures of Wool," 1887, p. 109. The movement of wool prices abroad during these years seems to have been about the same.

[2] In the Introduction to the volume on Manufactures of the "Census of 1860," to which reference has been made before, there is a useful sketch of the history of various branches of manufacture up to that date.

tries that could not have maintained themselves under freedom of trade. They did not operate as strictly protective duties, and did not bring that extra tax on consumers which is the peculiar effect of protective duties. The only industry which presents a marked exception to these general conditions is the manufacture of the cruder forms of iron. In that industry, the conditions of production in the eastern part of the United States were such that the protective duties of 1842 caused a return to old processes, and an enhanced price to the country without a corresponding gain to producers. Even under the rates of 1846 and after the use of anthracite coal, the same effect can be seen, though in less degree.

We often hear it said that any considerable reduction from the scale of duties in the present tariff, whose character and history will be considered in the following pages, would bring about the disappearance of manufacturing industries, or at least a disastrous check to their development. But the experience of the period before 1860 shows that predictions of this sort have little warrant. At present, as before 1860, the great textile manufactures are not dependent to any great extent on protective duties of the kind now imposed. The direction of their growth has been somewhat affected by these duties, yet in a less degree than might have been expected. It is striking that both under the system of high protection which has been maintained since the civil war, and under the more moderate system that preceded it, the cotton

and woollen industries have been kept in the main to those goods of common use and large consumption to which the conditions of the United States might be expected to lead them. Very heavy duties have indeed stimulated the manufacture of more expensive goods; and the gradual change in the general economic situation must in any case have had some effect in making the textile industries more diversified. The iron manufacture has advanced by leaps and bounds, chiefly through the development of great natural resources in the heart of the country—hardly touched during the period here under discussion. But even during this period it held its own. Manufactures in general grew and flourished. The extent to which mechanical branches of production have been brought into existence by the protective system has been greatly exaggerated by its advocates; and even the character and direction of their development have been influenced less than, on grounds of general reasoning, might have been expected.

THE HISTORY OF THE EXISTING TARIFF.

CHAPTER I.

THE WAR TARIFF.

THE Civil War revolutionized the financial methods of the United States. A new monetary system was created, and tax resources before undreamed of were resorted to, at first timorously, in the end with a rigor that hardly knew bounds. The tariff, which had long been the sole source of federal income, was supplemented by a series of extraordinary internal taxes, and was itself called on to yield more revenue and still more. The high duties which the war thus caused to be imposed, at first regarded as temporary, were retained, increased, and systematized, so developing gradually into a system of extreme protection. For many years the tariff was spoken of, and accurately, as "the war tariff,"—a name which faded out of use as the community became accustomed to the new régime, and forgot the various half-hearted and unsuccessful endeavors which were made from time to time toward reduction and reform.

The tariff before the war.

Before the war we had a tariff of duties which, though not arranged completely or consistently on the principles of free trade, was yet very moderate in comparison with the existing system. For about fifteen years before the Rebellion began, duties on imports were fixed by the acts of 1846 and 1857. The act of 1846 had been passed by the Democratic party with the avowed intention of putting into operation, as far as was possible, the principles of free trade. This intention, it is true, was by no means carried out consistently. Purely revenue articles, like tea and coffee, were admitted free of duty; and on the other hand, articles like iron and manufactures of iron, cotton goods, wool, and woollen goods,—in fact most of the important articles with which the protective controversy has been concerned,—were charged with a duty of thirty per cent. Other articles again, like steel, copper, lead, were admitted at a lower duty than this, not for any reasons of revenue, but because they were not then produced to any extent within the country, and because protection for them in consequence was not asked. Protection was by no means absent from the act of 1846; and the rate of thirty per cent., which it imposed on the leading articles, would be supposed, in almost any civilized country, to give even a high degree of protection. Nevertheless, the tariff of 1846 was, in comparison with the present tariff, a moderate measure; and a return to its rates would now be considered a great step of reform by those who are op-

posed to protective duties. The act of 1857 took away still more from the restrictive character of our tariff legislation. Congress, it may be remarked, acted in 1857 with reasonable soberness and impartiality, and without being influenced by political considerations. The maximum protective duty was reduced to twenty-four per cent.; many raw materials were admitted free; and the level of duties on the whole line of manufactured articles was brought down to the lowest point which has been reached in this country since 1815. It is not likely we shall see, for a great many years to come, a nearer approach to the free-trade ideal.

The country accepted the tariff acts of 1846 and 1857, and was satisfied with them. Except in the years immediately following the passage of the former act, when there was some attempt to induce a return to a more rigid protective system, agitation on the tariff ceased almost entirely. There is no doubt that the period from 1846 to 1860 was a time of great material prosperity, interrupted, but not checked, by the crisis of 1857. It would be going too far to assert that this general prosperity was due chiefly to the liberal character of the tariff. Other causes exercised a great and perhaps a predominant influence. But the moderate tariff presumably was one of the elements that contributed to the general welfare. It may be well to add that prosperity was not confined to any part of the country, or to any branches of industry. Manufactures in general continued to flourish; and the

reduction of duties which was made in 1857 had the consent and approbation of the main body of the manufacturing class.

The crisis of 1857 had caused a falling off in the revenue from duties. This was made the occasion for a reaction from the liberal policy of 1846 and 1857. In 1861 the Morrill tariff act began a change toward a higher range of duties and a stronger application of protection. The Morrill act is often spoken of as if it were the basis of the present protective system. But this is by no means the case. The tariff act of 1861 was passed by the House of Representatives in the session of 1859–60, the session preceding the election of President Lincoln. It was passed, undoubtedly, with the intention of attracting to the Republican party, at the approaching Presidential election, votes in Pennsylvania and other States that had protectionist leanings. In the Senate the tariff bill was not taken up in the same session in which it was passed in the House. Its consideration was postponed, and it was not until the next session—that of 1860–61—that it received the assent of the Senate and became law. It is clear that the Morrill tariff was carried in the House before any serious expectation of war was entertained; and it was accepted by the Senate in the session of 1861 without material change. It therefore forms no part of the financial legislation of the war, which gave rise in time to a series of measures that entirely superseded the Morrill

The Morrill tariff act of 1861.

tariff. Indeed, Mr. Morrill and the other supporters of the act of 1861 declared that their intention was simply to restore the rates of 1846. The important change which they proposed to make from the provisions of the tariff of 1846 was to substitute specific for *ad-valorem* duties. Such a change from *ad-valorem* to specific duties is in itself by no means objectionable; but it has usually been made a pretext on the part of protectionists for a considerable increase in the actual duties paid. When protectionists make a change of this kind, they almost invariably make the specific duties higher than the *ad-valorem* duties for which they are supposed to be an equivalent,—a circumstance which has given rise to the common notion, of course unfounded, that there is some essential connection between free trade and *ad-valorem* duties on the one hand, and between protection and specific duties on the other hand. The Morrill tariff formed no exception to the usual course of things in this respect. The specific duties which it established were in many cases considerably above the *ad-valorem* duties of 1846. The most important direct changes made by the act of 1861 were in the increased duties on iron and on wool, by which it was hoped to attach to the Republican party Pennsylvania and some of the Western States. Most of the manufacturing States at this time still stood aloof from the movement toward higher rates.[1]

[1] Mr. Rice, of Massachusetts, said in 1860: "The manufacturer asks no additional protection. He has learned, among other things, that the great-

Hardly had the Morrill tariff act been passed when Fort Sumter was fired on. The Civil War began. The need of additional revenue for carrying on the great struggle was immediately felt; and as early as the extra session of the summer of 1861, additional customs duties were imposed. In the next regular session, in December, 1861, a still further increase of duties was made. From that time till 1865 no session, indeed, hardly a month of any session, passed in which some increase of duties on imports was not made. During the four years of the war every resource was strained for carrying on the great struggle. Probably no country has seen, in so short a time, so extraordinary a mass of financial legislation. A huge national debt was accumulated; the mischievous expedient of an inconvertible paper currency was resorted to; a national banking system unexpectedly arose from the confusion; an enormous system of internal taxation was created; the duties on imports were vastly increased and extended. We are concerned here only with the change in the tariff; yet it must be borne in mind that

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est evil, next to a ruinous competition from foreign sources, is an excessive protection, which stimulates a like ruinous and irresponsible competition at home,"—*Congress. Globe*, 1859–60, p. 1867. Mr. Sherman said: "When Mr. Stanton says the manufacturers are urging and pressing this bill, he says what he must certainly know is not correct. The manufacturers have asked over and over again to be let alone. The tariff of 1857 is the manufacturers' bill; but the present bill is more beneficial to the agricultural interest than the tariff of 1857."—*Ibid.*, p. 2053. *Cf.* Hunter's Speech, *Ibid.*, p. 3010. In later years Mr. Morrill himself said that the tariff of 1861 "was not asked for, and but coldly welcomed, by manufacturers, who always and justly fear instability."—*Congr. Globe*, 1869–70, p. 3295.

these changes were only a part of the great financial measures which the war called out. Indeed, it is impossible to understand the meaning of the changes which were made in the tariff without a knowledge of the other legislation that accompanied it, and more especially of the extended system of internal taxation which was adopted at the same time. To go through the various acts for levying internal taxes and imposing duties on imports is not necessary in order to make clear the character and bearing of the legislation of the war. It will be enough to describe those that are typical and important. The great acts of 1862 and 1864 are typical of the whole course of the war measures; and the latter is of particular importance, because it became the foundation of the existing tariff system.

It was not until 1862 that the country began to appreciate how great must be the efforts necessary to suppress the Rebellion, and that Congress set to work in earnest to provide the means for that purpose. Even in 1862 Congress relied more on selling bonds and on issuing paper-money than on immediate taxation. But two vigorous measures were resorted to for taxing the people immediately and directly. The first of these was the internal revenue act of July 1, 1862. This established a comprehensive system of excise taxation. Specific taxes were imposed on the production of iron and steel, coal-oil, paper, leather, and other articles. A general *ad-valorem* tax was

Tax and tariff acts of 1862.

imposed on other manufactures. In addition, licenses were required in many callings. A general income tax was imposed. Railroad companies, steamboats, express companies were made to pay taxes on their gross receipts. Those who have grown to manhood since the great struggle closed find it difficult to imagine the existence and to appreciate the burden of this heavy and vexatious mass of taxation; for it was entirely swept away within a few years after the end of the war.

The second great measure of taxation to which Congress turned at this time was the tariff act of July 14, 1862. The object of this act, as was stated by Messrs. Morrill and Stevens, who had charge of its passage in the House, was primarily to increase duties only to such an extent as might be necessary in order to offset the internal taxes of the act of July 1st.[1] But although this was the chief object of the act, protective intentions were entertained by those who framed it, and were carried out. Both Messrs. Morrill and Stevens were avowed protectionists, and did not conceal that they meant in many cases to help the home producer. The increase of duties on articles which were made in this country was therefore,

[1] Mr. Morrill said, in his speech introducing the tariff bill: "It will be indispensable for us to revise the tariff on foreign imports, so far as it may be seriously disturbed by any internal duties, and to make proper reparation. * * * If we bleed manufacturers, we must see to it that the proper tonic is administered at the same time."—*Congr. Globe*, 1861–62, p. 1196. Similarly Mr. Stevens said: "We intended to impose an additional duty on imports equal to the tax which had been put on the domestic articles. It was done by way of compensation to domestic manufacturers against foreign importers."—*Ibid.*, p. 2979.

in all cases, at least sufficient to afford the domestic producers compensation for the internal taxes which they had to pay. In many cases it was more than sufficient for this purpose, and brought about a distinct increase of protection. Had not the internal revenue act been passed, affording a good reason for some increase of duties; had not the higher taxation of purely revenue articles, like tea and coffee, been a justifiable and necessary expedient for increasing the government income; had not the increase even of protective duties been quite defensible as a temporary means for the same end; had not the general feeling been in favor of vigorous measures for raising the revenue;—had these conditions not existed, it would have been very difficult to carry through Congress a measure like the tariff of 1862. But, as matters stood, the tariff was easily passed. Under cover of the need of revenue and of the intention to prevent domestic producers from being unfairly handicapped by the internal taxes, a clear increase of protection was in many cases brought about.

The war went on; still more revenue was needed. Gradually Congress became convinced of the necessity of resorting to still heavier taxation, and of the willingness of the country to pay all that was necessary to maintain the Union. Passing over less important acts, we have to consider the great measure that was the climax of the financial legislation of the war. The three revenue acts of June 30, 1864, practically form one measure, and that probably the greatest measure of taxation which the

world has seen. The first of the acts provided for an enormous extension of the internal-tax system; the second for a corresponding increase of the duties on imports; the third authorized a loan of $400,000,000.

Internal revenue act, 1864.

The internal revenue act was arranged, as Mr. David A. Wells has said, on the principle of the Irishman at Donnybrook fair; "Whenever you see a head, hit it; whenever you see a commodity, tax it." Every thing was taxed, and taxed heavily. Every ton of pig-iron produced was charged two dollars; every ton of railroad iron three dollars; sugar paid two cents a pound; salt, six cents a hundred-weight. The general tax on all manufactures produced was five per cent. But this tax was repeated on almost every article in different stages of production. Raw cotton, for instance, was taxed two cents a pound; as cloth, it again paid five per cent. Mr. Wells estimated that the government in fact collected between eight and fifteen per cent. on every finished product. Taxes on the gross receipts of railroad, steamboat, telegraph, express, and insurance companies were levied, or were increased where already in existence. The license-tax system was extended to almost every conceivable branch of trade. The income tax was raised to five per cent. on moderate incomes, and to ten per cent. on incomes of more than $10,000.

Tariff act of 1864.

The tariff act of 1864, passed at the same time with the internal revenue act, also brought about a great increase in the rates of taxation. Like the tariff act

of 1862, that of 1864 was introduced, explained, amended, and passed under the management of Mr. Morrill, who was Chairman of the Committee on Ways and Means. That gentleman again stated, as he had done in 1862, that the passage of the tariff act was rendered necessary in order to put domestic producers in the same situation, so far as foreign competition was concerned, as if the internal taxes had not been raised. This was one great object of the new tariff; and it may have been a good reason for bringing forward some measure of the kind. But it explains only in part the measure which in fact was proposed and passed. In 1864 the men who were in charge of the national finances were as prompt in taxing heavily as in 1861 they had been slow in taxing at all. Under the pressure of almost unlimited financial need, and with the conviction that a supreme effort was called for, they were willing to tax every possible article at the highest rate that any one had the courage to suggest. They carried this method out to its fullest extent in the tariff act of 1864, as well as in the tax act of that year. At the same time these statesmen were protectionists, and did not attempt to conceal their protectionist leanings. What between their willingness to make every tax and duty as high as possible for the sake of raising revenue, and their belief that high import duties were beneficial to the country, the protectionists had an opportunity such as the country has never before given them. It would be unfair to say that Mr. Morrill, Mr.

Stevens, and the other gentlemen who shaped the revenue laws, consciously used the urgent need of money for the war as a means of carrying out their protectionist theories, or of promoting, through high duties, private ends for themselves or others. But it is certain that their method of treating the revenue problems resulted in a most unexpected and extravagant application of protection, and moreover, made possible a subservience of the public needs to the private gains of individuals such as unfortunately made its appearance in many other branches of the war administration. There was neither time nor disposition to inquire critically into the meaning and effect of any proposed scheme of rates. The easiest and quickest plan was to impose the duties which the domestic producers suggested as necessary for their protection. Not only during the war, but for several years after it, all feeling of opposition to high import duties almost entirely disappeared. The habit of putting on as high rates as any one asked had become so strong that it could hardly be shaken off; and even after the war, almost any increase of duties demanded by domestic producers was readily made. The war had in many ways a bracing and ennobling influence on our national life; but its immediate effect on business affairs, and on all legislation affecting moneyed interests, was demoralizing. The line between public duty and private interests was often lost sight of by legislators. Great fortunes were made by changes in legislation urged and brought about by those who were

benefited by them; and the country has seen with sorrow that the honor and honesty of public men did not remain undefiled. The tariff, like other legislation on matters of finance, was affected by these causes. Schemes for money-making were incorporated in it, and were hardly questioned by Congress. When more enlightened and unselfish views began to make their way, and protests were made against the abuses and excessive duties of the war period, these had obtained, as we shall see, too strong a hold to be easily shaken off.

Such were the conditions under which the tariff act of 1864 was passed. As in 1862, three causes were at work: in the first place, the urgent need of revenue for the war; in the next, the wish to offset the internal taxes imposed on domestic producers; and finally, the protectionist leanings of those who managed our financial legislation. These causes made possible a tariff act which in ordinary times would have been summarily rejected. It raised duties greatly and indiscriminately,—so much so, that the average rate on dutiable commodities, which had been 37.2 per cent. under the act of 1862, became 47.06 per cent. under that of 1864. It was in many ways crude and ill-considered; it established protective duties more extreme than had been ventured on in any previous tariff act in our country's history; it contained flagrant abuses, in the shape of duties whose chief effect was to bring money into the pockets of private individuals.

Nothing more clearly illustrates the character of this

piece of legislation, and the circumstances which made its enactment a possibility, than the public history of its passage through Congress. The bill was introduced into the House on June 2d by Mr. Morrill. General debate on it was stopped after one day. The House then proceeded to the consideration of amendments. Almost without exception amendments offered by Mr. Morrill were adopted, and all others were rejected. After two days had been given in this way to the amendments, the House, on June 4th, passed the bill. In the Senate much the same course was followed. The consideration of the bill began on June 16th; it was passed on the following day. That is to say, five days in all were given by the two houses to this act, which was in its effects one of the most important financial measures ever passed in the United States. The bill was accepted as it came from the Committee on Ways and Means, and was passed practically without debate or examination.

This haste was the natural result of the critical stage of affairs and the urgent need of revenue. As in other parts of the legislation of the war period, the recommendations of the Administration and of the party leaders were acted on promptly and with the minimum of debate. Obviously, it was not intended or expected that measures so enacted should become the foundation of a permanent economic policy. Yet in several directions this proved to be the result, and in none more strikingly than in the final outcome of the tariff changes. The legal-tender

paper, resorted to as a war measure more distinctly than any other, was retained, it is true; but at least specie payments were resumed, even though after an interval unexpectedly long, and the greatest evils of inconvertible money were done away with. The national-banking system, from the first more clearly designed to be a permanent institution, was also retained, though with changes and vicissitudes not dreamed of at the time of its foundation. The national debt was reduced at a rate unexampled in history. Most of the internal taxes were repealed as fast as possible, leaving only those on spirits and tobacco as permanent parts of the federal fiscal system. The tariff was changed least of all. Some significant modifications in the revenue duties were indeed made, as will be pointed out in the following chapters. But on almost all the articles with which the protective controversy is concerned the rates of the act of 1864 were retained, virtually without change, for twenty years or more; and when changes were finally made, they were undertaken as if these rates were not in any sense exceptional, but were the normal results of an established policy.

The identical duties fixed in 1864 were left in force for a long series of years.[1] When a general revision came to

[1] It should be stated that the act of 1864 was not in form a general act, repealing all previous statutes. It left in force, for instance, all provisions of the Morrill tariff of 1861 and of the act of 1862, not specifically affected by its provisions. But it changed so generally the range of import duties, and especially the protective duties, that it had practically the effect of a new general tariff act.

be made, in 1883, they had ceased to be thought of as the results of war legislation. The public, and especially the protected industries, had come to think of them as parts of a permanent policy. Thus habituated to high duties, it was not a difficult step for Congress, under the stress of political contention, to proceed to duties still higher. Hence the war tariff, though from time to time patched, amended, revised, not only remained in force in its important provisions for nearly twenty years, but became in time the basis for an even more stringent application of protection. The steps by which this unexpected transformation in the customs policy of the United States was brought about will be followed in the ensuing chapters.

CHAPTER II.

THE FAILURE TO REDUCE THE TARIFF AFTER THE WAR.

WHEN the war closed, the revenue acts which had been hastily passed during its course constituted a chaotic mass. Congress and the Secretary of the Treasury immediately set to work to bring some order into this chaos, by funding and consolidating the debt, by contracting the paper currency, and by reforming and reducing the internal taxes.[1] The years between 1865 and 1870 are full of discussions and enactments on taxation and finance. On some parts of the financial system, in regard to which there was little disagreement, action was prompt and salutary. The complicated mass of internal taxes was felt to be an evil by all. It bore heavily and vexatiously on the people; and Congress proceeded to sweep it away with all possible speed. As soon as the immense floating debt had been funded, and the extent of the

[1] Those who wish to get some knowledge of the confused character of the financial legislation called out by the war, are referred to Mr. David A. Wells's excellent essay on "The Recent Financial Experiences of the United States" (1872). Those who wish to study more in detail the course of events after the war should read Mr. Wells's reports as Commissioner of the Revenue, of 1867, 1868, 1869, and 1870.

annual needs of the government became somewhat clear, Congress set to work at repealing and modifying the excise laws. It is not necessary to enumerate the various steps by which the internal-tax system was modified. Year after year acts for reducing and abolishing internal taxes were passed. By 1872 all those which had any connection with the subject of our investigation—the protective duties—had disappeared.[1] The taxes on spirits and beer, those on banks, and a few comparatively unimportant taxes on matches, patent medicines, and other articles were retained. But all those taxes which bore heavily on the productive resources of the country—those taxes in compensation for which higher duties had been imposed in 1862 and 1864—were entirely abolished.

Abolition of the internal taxes 1866–1872.

Step by step with this removal of the internal taxes, a reduction of import duties should have taken place; at the least, a reduction which would have taken off those additional duties that had been put on in order to offset the internal taxes. This, however, Congress hesitated to undertake. We have seen in the preceding chapter that the opportunity given by the war system of taxation was seized by the protectionists in order to carry out their wishes. It would not be easy to say whether at the time the public men who carried out this legislation meant the new system of import duties to be permanent. Certainly the war methods of finance as a whole were not meant to

[1] The most important acts for reducing the internal taxes were those of July 11, 1866; March 2, 1867; March 31, 1868; July 14, 1870; June 6, 1872.

remain in force for an unlimited time. Some parts of the tariff were beyond doubt intended to be merely temporary; and the reasonable expectation was that the protective duties would sooner or later be overhauled and reduced. Had the question been directly put to almost any public man, whether the tariff system of the war was to be continued, the answer would certainly have been in the negative,—that in due time the import duties were to be lowered.[1] During the years of confusion immediately after the war little was attempted; but soon a disposition to affect some reform in the incongruous mass of duties began to be shown. Each year schemes for reduction and reform were brought forward. Commissions were appointed, bills were elaborated and considered; but the reform was put off from year to year. The pressure from the interested domestic producers was strong; the power of the lobby was great; the overshadowing problem of reconstruction absorbed the energies of Congress. Gradu-

[1] As late as 1870, Mr. Morrill said: "For revenue purposes, and not solely for protection, fifty per cent. in many instances has been added to the tariff [during the war] to enable our home trade to bear the new but indispensable burdens of internal taxation. Already we have relinquished most of such taxes. So far, then, as protection is concerned * * * we might safely remit a percentage of the tariff on a considerable share of our foreign importations. * * * *It is a mistake of the friends of a sound tariff to insist on the extreme rates imposed during the war*, if less will raise the necessary revenue. * * * Whatever percentage of duties was imposed on foreign goods to cover internal taxation on home manufactures, should not now be claimed as the lawful prize of protection, when such taxes have been repealed. There is no longer an equivalent."—*Congress. Globe*, 1869–70, p. 3295. These passages occur at the end of a long speech in favor of the principle of protection.

ally, as the organization of industry in the country adapted itself more closely to the tariff as it was, the feeling that no reform was needed obtained a strong hold. Many industries had grown up, or had been greatly extended, under the influence of the war legislation. As that legislation continued unchanged, still more capital was embarked in establishments whose existence or prosperity was in some degree dependent on its maintenance. All who were connected with establishments of this kind asserted that they would be ruined by any change. The business world in general tends to be favorable to the maintenance of things as they are. The country at large, and especially those parts of it in which the protected industries were concentrated, began to look on the existing state of things as permanent. The extreme protective system, which had been at the first a temporary expedient for aiding in the struggle for the Union, adopted hastily and without any thought of deliberation, gradually became accepted as a permanent institution. From this it was a short step, in order to explain and justify the existing state of things, to set up high protection as a theory and a dogma. The restraint of trade with foreign countries, by means of import duties of forty, fifty, sixty, even a hundred per cent., came to be advocated as a good thing in itself by many who, under normal circumstances, would have thought such a policy preposterous. Ideas of this kind were no longer the exploded errors of a small school of economists; they became the foundation of the policy

of a great people. Then the mass of restrictive legislation which had been hurriedly piled up during the war, was strengthened and completed, and made into a firm and consistent edifice. On purely revenue articles, such as are not produced at all in the country, the duties were almost entirely abolished. A few raw materials, it is true, were admitted at low rates, or entirely free of duty. But these were exceptions, made apparently by accident. As a rule, the duties on articles produced in the country, that is, the protective duties, were retained at the war figures, or raised above them. The result was that the tariff gradually became exclusively and distinctly a protective measure; it included almost all the protective duties put on during the war, added many more to them, and no longer contained the purely revenue duties of the war.

We turn now to a somewhat more detailed account of the process by which the reform of the tariff was prevented. To give a complete account of the various tariff acts which were passed, or of the tariff bills which were pressed without success, is needless. Every session of Congress had its array of tariff acts and tariff bills; and we may content ourselves with an account of those which are typical of the general course of events. Of the attempts at reform which were made in the years immediately after the war, the fate of the tariff bills of 1867 is characteristic. Two proposals were then before Congress: one a bill passed by the House at the previous session; the other a bill

Unsuccessful tariff bill of 1867.

prepared by Mr. David A. Wells, then Special Commissioner of the Revenue, and heartily approved by Secretary McCulloch. The great rise in prices and in money wages in these years, and the industrial embarrassment which followed the war, had caused a demand for still higher import duties; the House bill had been framed to answer this demand, and proposed a general increase. Mr. Wells recommended a different policy. He had not then become convinced of the truth of the principles of free trade; but he had clearly seen that the indiscriminate protection which the war tariff gave, and which the House bill proposed to augment, could not be beneficial. His bill reduced duties on raw materials, such as scrap-iron, coal, lumber, hemp, and flax; and it either maintained without change or slightly lowered the duties on most manufactured articles. A careful rearrangement was at the same time made in the rates on spices, chemicals, dyes, and dye-woods,—articles of which a careful and detailed examination is necessary for the determination of duties, and in regard to which the tariff contained then, as it does now, much that was arbitrary and indefensible. Mr. Wells's bill, making these reforms, gained the day over the less liberal House bill. It was passed by the Senate, as an amendment to the House bill, by a large majority (27 to 10). In the House there was also a majority in its favor; but unfortunately a two-thirds majority was necessary in order to suspend the rules and bring it before the House. The vote was 106 to 64 in favor of

the bill; the two-thirds majority was not obtained, and it failed to become law. The result was not only that no general tariff bill was passed at this session, but the course of tariff reform for the future received a regrettable check. Had Mr. Wells's proposals been enacted, it is not unlikely that the events of the next few years would have been very different from what in fact they were. It would be too much to say that these proposals looked forward to still further steps in the way of moderating the protective system, or that their favorable reception showed any distinct tendency against protection. There was at that time no free-trade feeling at all, and Mr. Wells's bill was simply a reform measure from the protectionist point of view. But the vote on it is nevertheless significant of the fact that the extreme and uncompromising protective spirit was not then all-powerful. The bill, it is true, had been modified in a protectionist direction in various ways before it came to be voted on; but the essential reductions and reforms were still contained in it and the votes show that the protectionist feeling was far from being solidified at that time to the extent that it came to be a few years later. Had the bill of 1867 been passed, the character of recent tariff legislation might have been very different. A beginning would have been made in looking at the tariff from a sober point of view, and in reducing duties that were clearly pernicious. The growing habit of looking on the war rates as a permanent system might have been checked, and the attempts at tariff reform in subse-

quent years would probably have found stronger support and met with less successful opposition. From this time till the tariff act of 1883 was passed, there was no general tariff bill which had so good a chance of being passed. The failure of the attempt of 1867 encouraged the protectionists in fighting for the retention of the war duties wherever they could not secure an increase over and above them; and in this contest they were, with few exceptions, successful.[1]

Act of 1870.

Of the legislation that was in fact carried out, the act of 1870 is a fair example. It was passed in compliance with the demand for a reduction of taxes and for tariff reform, which was at that time especially strong in the West, and was there made alike by Republicans and Democrats.[2] The declared intention of those who framed it and

[1] Mr. Wells's bill and the rates proposed in the House bill may be found in his report for 1866–67, pp. 235–290. The principle of "enlightened protection" on which he proceeded is stated on p. 34. At this time Mr. Wells was still a protectionist; it was not until he prepared his report for 1868–69 that he showed himself fully convinced of the unsoundness of the theory of protection. His able investigations and the matter-of-fact tone of all of his reports gave much weight to his change of opinion, and caused it to strengthen greatly the public feeling in favor of tariff reform.

[2] President Garfield (then Representative) said in 1870: "After studying the whole subject as carefully as I am able, I am firmly of the opinion that the wisest thing that the protectionists in this House can do is to unite on a moderate reduction of duties on imported articles. * * * If I do not misunderstand the signs of the times, unless we do this ourselves, prudently and wisely, we shall before long be compelled to submit to a violent reduction, made rudely and without discrimination, which will shock, if not shatter, all our protected industries."—Young's Report, p. clxxii. It is worthy of remark that Mr. Garfield had also supported earnestly the unsuccessful bill of 1867. He had appealed to his party to vote so as to make up the two-thirds majority necessary for its consideration, telling them that later

had charge of it in Congress was to reduce taxation. But the reductions made by it were, almost without exception, on purely revenue articles. The duties on tea, coffee, wines sugar, molasses, and spices were lowered. Other articles of the same kind were put on the free list. The only noteworthy reduction in the protective parts of the tariff was in the duty on pig-iron, which went down from $9.00 to $7.00 a ton. On the other hand, a very considerable increase of duties was made on a number of protected articles—on steel rails, on marble, on nickel, and on other articles.[1] We shall have occasion to refer to some of these indefensible exactions in another connection.[2] At present we are concerned only with the reductions of duty which were carried out. Among the protective duties the lowering of that on pig-iron was the only one of importance. This change, indeed, might well have been made at an earlier date, for the internal tax of $2.00 on pig-iron (in compensation for which the tariff rate had been raised to $9.00 in 1864) had been taken off as early as 1866.[3]

The only effort to reform the protective parts of the tariff which had any degree of success, was made in

they might "make up their record" by voting against it.—*Congr. Globe*, 1866–67, pp. 1657, 1658.

[1] An increase in the duties on bar-iron was also proposed in the bill as reported by the Committee on Ways and Means; but this, fortunately, was more than could be carried through. See the speeches of Messrs. Brooks (*Congr. Globe*, 1869–70, part 7, appendix, pp. 163–167) and Allison (*ibid.*, p. 192 *et seq.*), which protest against the sham reductions of the bill.

[2] See chapter iii.

[3] See the list of reductions made by the act of 1870 in Young's Report, p. clxxvii.

1872. The tactics of the proctectionists in that year illustrate strikingly the manner in which attempts at tariff reform have been frustrated; and the history of the attempt is, from this point of view, so instructive that it may be told somewhat in detail. The situation in 1872 was in many ways favorable for tariff reform. The idea of tax and tariff reform was familiar to the people at large. It was not as yet openly pretended that the protective duties were to remain indefinitely as they had been fixed in the war. The act of 1870 had made a concession by the reduction on pig-iron; further changes of the same kind were expected to follow. Moreover, the feeling in favor of tariff reform was in all these years particularly strong in the West. So strong was it that, as has already been noted, it overrode party differences, and made almost all the Western Congressmen, whether Democrats or Republicans, act in favor of reductions in the tariff. The cause of this state of things is to be found in the economic condition of the country from the end of the war till after the panic of 1873. The prices of manufactured goods were then high, and imports were large. On the other hand, exports were comparatively small and the prices of grain and provisions low. The agricultural population was far from prosperous. The granger movement, and the agitation against the railroads, were one result of the depressed condition of the farmers. Another result was the strong feeling against the tariff, which the farmers

Situation in 1872.

rightly believed to be among the causes of the state of things under which they were suffering.[1] Their representatives in Congress were therefore compelled to take a stand in favor of lowering the protective duties. The Western members being nearly all agreed on this subject, Congress contained a clear majority in favor of a reform in the tariff. Party lines at that time had little influence on the protective controversy, and, although both houses were strongly Republican, a strong disposition showed itself in both in favor of measures for lowering the protective duties.

Added to all this, the state of the finances demanded immediate attention. In 1872, as later in 1883 and in 1890, a redundant revenue compelled Congress to take action of some sort on the tariff as the chief source of federal income. In each of the fiscal years 1870–71 and 1871–72, the surplus revenue, after paying all appropriations and all interest on the public debt, amounted to about $100,000,000, a sum greatly in excess of any requirements of the sinking fund. The government was buying bonds in the open market in order to dispose of the money that was flowing into the treasury vaults.[2]

[1] No satisfactory investigation of the period preceding the crisis of 1873 has yet been made. Of the fact that the situation was especially depressing for the agricultural parts of the country, there can be no doubt. The speculative mania and the fictitious prosperity of those years were felt most strikingly in manufactures and railroad building; exactly why so little effect of this appeared in agriculture has never been clearly explained. The whole period will repay careful economic study.

[2] On account of the low premium on bonds and the high premium on gold,

This being the state of affairs, the Committee on Ways and Means introduced into the House a bill which took decided steps in the direction of tariff reform. Mr. Dawes, of Massachusetts, the chairman of the committee, was opposed to the recommendations of the majority of its members, and therefore left the explanation and management of the bill to Mr. Finkelnburg, of Missouri. That gentleman explained that the committee's measure was intended merely to "divest some industries of the superabundant protection which smells of monoply, and which it was never intended they should enjoy after the war."[1] The bill lopped off something from the protective duties in almost all directions. Pig-iron was to be charged $6.00 instead of $7.00 a ton. The duties on wool and woollens, and those on cottons, were to be reduced by about twenty per cent. Coal, salt, and lumber were subjected to lower duties. Tea and coffee were also to pay less; but the duties on them were not entirely abolished,—a circumstance which it is important to note in connection with subsequent events. The bill still left an ample measure of protection subsisting; but it was clearly intended to bring about an appreciable and permanent reduction of the war duties.

Reform bill in the House.

This bill was introduced into the House in April. Before that time another bill had been introduced in the

it was cheaper for the government at that time to buy bonds in the open market than to redeem them at par.

[1] See Mr. Finkelnburg's speech, *Congr. Globe*, 1871–72, pp. 2826–7.

Senate, by the committee of that body on finance, which also lowered duties, but by no means in so incisive a manner as the House bill. The Senate bill simply proposed to reduce all the protective duties by ten per cent. When the ten per cent. reduction was first suggested, it was strongly opposed by the protected interests, whose representatives, it is hardly necessary to say, were present in full force. They were unwilling to yield even so small a diminution. When, however, the House bill, making much more radical changes, was brought forward with the sanction of a majority of the Committee on Ways and Means, they saw that an obstinate resistance to any change might lead to dangerous results. A change of policy was accordingly determined on. Mr. John L. Hayes, who had been for many years Secretary of the Wool-Manufacturers' Association, and became President of the Tariff Commission of 1882, was at that time in Washington as agent for the wool manufacturers. Mr. Hayes has given an account of the events at Washington in 1872, from which it appears that he was chiefly instrumental in bringing about the adoption of a more far-sighted policy by the protectionists.[1] Mr. Hayes believed it to be more easy to defeat the serious movement in favor of tariff reform by making some slight concessions than by unconditional

Ten per cent. reduction proposed.

Policy of the protectionists.

[1] See the speech which Mr. Hayes made, shortly after the close of the session of 1872, at a meeting of the wool manufacturers in Boston ; printed in the *Bulletin of the Wool Manufacturers*, vol. iii., pp. 283–290.

opposition. The woollen manufacturers were first induced to agree to this policy; the Pennsylvania iron makers were next brought over to it; and finally, the whole weight of the protected interests was made to bear in the same direction. As a concession to the demand for reform, the general ten per cent. reduction was to be permitted. With this, however, was to be joined a sweeping reduction of the non-protective sources of revenue: the taxes on whiskey and tobacco were to be lowered, and the tea and coffee duties were to be entirely abolished.

This plan of action was successfully carried out. An act for abolishing the duties on tea and coffee was first passed.[1] This being disposed of, the general tax and tariff bill was taken up in the House. The Senate had already indicated its willingness to act in the manner desired by the protectionists. It had passed and sent to the House a bill making the general reduction of ten per cent., and nothing remained but to get the consent of the House. But this consent was not easily obtained. A large number of representatives were in favor of a more thorough and radical reform, and wished for the passage of the bill prepared by the Ways and Means Committee. But unfortunately the reform forces were divided, and only a part of them insisted on the Ways and Means bill. The remainder were willing to accept the ten per cent. reduction, which the protectionists yielded. On the other hand,

[1] The House had already passed, at the extra session in the spring of 1871, a bill for admitting tea and coffee free of duty. This bill was now taken up and passed by the Senate.

the protectionist members were united. Messrs. Kelley and Dawes led them, and succeeded in bringing their whole force to vote in favor of the horizontal reduction. The powerful influence of the Speaker, Mr. Blaine, was also on their side. They finally succeeded in having the original committee bill set aside, and in passing the bill for the ten per cent. reduction. Most of the revenue reformers in the end voted for it, believing it to be the utmost that could be obtained. It must be observed, however, to their credit, that the "horizontal" reduction of the protective duties was not the only concession to the reform feeling that was made by the act of 1872. It also contained a number of minor but significant changes of duty. The duty on salt was reduced to one half the previous rates; for the feeling against the war-duty on salt, which very clearly resulted in putting so much money into the pockets of the Syracuse and Saginaw producers, was too strong to be resisted. The duty on coal was reduced from $1.25 to 75 cents a ton. Some raw materials, of which hides and paper stock were alone of considerable importance, were admitted free of duty. The free list was also enlarged by putting on it a number of minor articles used by manufacturers. But the important change in the protective duties was the ten per cent. reduction, which applied to all manufactures of cotton, wool, iron, steel, metals in general, paper, glass, and leather,—that is, to all the great protective industries.

Act of 1872.

It is worth while to dwell for a moment on the abolition

of the duties on tea and coffee; for this change may fairly be said to have been decisive in fixing the character of our tariff system. The question was whether the reduction of the revenue should be effected by lowering the protective or the non-protective duties. As matters stood in 1872, the removal of the tea and coffee duties prevented a more extended reduction of the protective duties, and, as we shall presently see, eventually left these latter precisely at the point at which they had been before.

The difference in effect between duties on articles like tea and coffee on the one hand, and articles like iron and wool on the other, is easily stated. Both are indirect taxes, reaching the consumer in the shape of higher prices on the commodities he uses. But when a duty is imposed on an article like tea and coffee, the whole increase in price to the consumer is offset by the same amount of revenue received by the government; whereas when a duty is imposed on an article like iron or wool, the effect is different. In the latter case also the commodity is increased in price to the consumer, and he is thereby taxed. So far as the articles continue to be imported, the increased price, as in the case of tea and coffee, represents revenue received by the government. But when the consumer buys and uses an article of this kind made at home, he must pay an increased price, or tax, quite as much as when he buys the imported article, with the difference that the tax is not paid to the government, but to the home producer. The extra price so received by the home

producer does not necessarily, or indeed usually, yield him exceptionally high profits. It is true that in some cases of more or less perfect monopoly he may make, permanently or for a long time, exceptionally high profits; and in these cases there is ground for saying that the protective system has the effect of robbing Peter to pay Paul. But in the majority of cases, where the conditions of monopoly do not exist, the home producer, while getting a higher price because of the duty, does not make correspondingly high profits. It may cost more, for one reason or another, to make the article at home than it costs to make it abroad, and the duty simply serves to offset this disadvantage of the domestic producer. In not a few cases, while it may cost more to make the article at home than abroad, the duty is greater than the difference in cost. Domestic competition then will cause the price at home to fall to a point less than the foreign price *plus* the duty; importation will cease; and yet a virtual tax will still be levied in the shape of prices higher than those which would obtain if there were no duty. Whatever be the details of the working of a protective duty, it is *prima facie* less desirable than a revenue duty, on the simple ground that the tax serves not to yield revenue, but to offset the greater cost of making the commodity at home. Whether the stimulus to domestic production brings other benefits to the community, sufficient to compensate for this disadvantage of protective duties involves the whole problem of the operation of international trade; indeed, the discussion spreads over the

entire range of economic principles, and can be settled only by reasoning in which all those principles are taken into account.

The history of the duties on tea and coffee is curious. In the early days of the Republic, when the need of revenue was pressing, they were subjected to duties which for those times were heavy. But in 1830, when the revenue became more than ample, and when there was also a strong feeling in favor of maintaining protective duties, tea, coffee, and cocoa were put on the free list. The situation in 1830 was not unlike that in 1872, except that the feeling through the North in favor of maintaining the protective duties was probably stronger at the earlier date. From 1830 to the Civil War, these revenue articles remained free of duty. The tariff acts of 1846 and 1857, though supposed to be based on revenue principles, made no attempt to secure revenue from this certain and simple source. Protective duties are as certainly taxes as are those on tea and coffee; but in the latter case no domestic producers ask for the retention of the taxes; consequently the revenue duties, unsupported by any strong interest, are easy victims when a curtailment of the national revenue becomes convenient or necessary.

For our present purpose it suffices to point out that the removal of the tea and coffee duties in 1872 served to fix for a long time the character of our legislation on the revenue articles of which they are the type. Step by step, in the various tariff acts passed since the war, all the non-protective duties have been swept away. By far

the most important recent legislation in this direction was the removal of the duties on sugar in the act of 1890, a change which, like the removal of the tea and coffee duties in 1872, emphasized the determination of the protectionists to give up the simplest and surest sources of revenue rather than yield an abatement of the protective duties.

To return from this digression to the tariff act of 1872. The free-traders were on the whole satisfied with it; they thought it a step in the right direction, and the beginning of a process of reform. The protectionists, however, believed that they had won a victory; and, as events proved, they were right.[1]

It is not within the purpose of this volume to discuss the intrinsic merits of a "horizontal reduction," such as was carried out in the act of 1872. Undoubtedly it is a simple and indiscriminating method of approaching the problem of tariff reform. The objections to it were very prominently brought forward when Mr. Morrison, during the session of 1883–84, proposed to take off ten per cent. from the duties, in exactly the same way that the tariff of 1872 had taken off ten per cent. It is certainly curious that this method, when proposed by Mr. Morrison in 1884, should be vehemently denounced by protectionists

[1] Mr. Hayes, in the speech already referred to, spoke of "the grand result of a tariff bill reducing duties fifty-three millions of dollars, and yet leaving the great industries almost intact. The present tariff (of 1872) was made by our friends, in the interest of protection." And again: "A reduction of over fifty millions of dollars, and yet taking only a shaving off from the protection duties."

as crude, vicious, unscientific, and impractical, although, when proposed by Mr. Dawes in 1872, it received their earnest support. There is, however, one objection to such a plan which was hardly mentioned in connection with Mr. Morrison's bill, but was brought out very clearly by the experience of 1872. This is, that a horizontal reduction can very easily be revoked. The reduction made in 1872 was repealed with little difficulty in 1875. After the panic of 1873, imports greatly diminished, and with them the customs revenue. No further thought of tax reduction was entertained; and soon a need of increasing the revenue was felt. In 1875 Congress, as one means to that end, repealed the ten per cent. reduction, and put duties back to where they had been before 1872.[1] The repeal attracted comparatively little attention, and was

Ten per cent. reduction repealed in 1875.

[1] It was far from necessary, for revenue purposes, to repeal the ten per cent. clause. Mr. Dawes (who advocated in 1875 the repeal of his own measure of 1872) attempted to show the need of raising the tariff by assuming that a fixed sum of $47,000,000 per year was necessary for the sinking-fund,—that the faith of the government was pledged to devoting this sum to the redemption of the debt. But it was very clearly shown that the government never had carried out the sinking-fund provision in any exact way. In some years it bought for the sinking fund much less than the one per cent of the debt which was supposed to be annually redeemed; in other years (notably in 1869–73) it bought much more than this one per cent. The same policy has been followed in recent years. There can be little doubt that the need of providing for the sinking fund was used merely as an excuse for raising the duties. See Mr. Wood's remarks, *Congr. Record*, 1874–75, pp. 1187, 1188, and *cf.* Mr. Beck's speech, *ibid.*, pp. 1401, 1402.

It may be noted that in 1875 President Grant and the Secretary of the Treasury recommended, and men like Senators Sherman and Schurz supported, a re-imposition of duties on tea and coffee as the best means of increasing the customs revenues.

carried without great opposition. If a detailed examination of the tariff had been made in 1872, and if duties had been reduced in that year carefully and with discrimination, it would have been much more difficult in 1875 to put them back to the old figures. If some of the duties which are of a particularly exorbitant or burdensome character had been individually reduced in 1872, public opinion would not easily have permitted the restitution of the old rates. But the general ten per cent. reduction, which touched none of the duties in detail, was repealed without attracting public attention. The old rates were restored; and the best opportunity which the country has had for a considerable modification of the protective system, slipped by without any permanent result.

Of the attempts at reform which were made between 1875 and 1883, little need be said. Mr. Morrison in 1876. and Mr. Wood in 1878, introduced tariff bills into the House. These bills were the occasion of more or less debate; but there was at no time any probability of their being enacted.[1] In 1879 the duty on quinine was abolished entirely,—a measure most beneficial and praiseworthy in itself, but not of any considerable importance in the economic history of the country.

Of the tariff act of 1883 we do not purpose speaking in

[1] Those who are interested in the details of these measures will find the bill of 1876 explained in Mr. Morrison's speech, in *Cong. Record*, 1875–1876, p. 3321. The bill of 1878 was similarly explained by Mr. Wood, *Cong. Record*, 1877–78, p. 2398. It was at one time supposed that Mr. Wood's bill might be passed by the House; but the enacting clause was struck out, after some debate, by a vote of 137 to 114.

this connection. It will be discussed in detail in the concluding pages.

We have now completed our account of the attempts to reform the tariff which were made between the close of the Civil War and the general revision of 1883. It is clear that the duties, as they were imposed in the act of 1864, were retained substantially without change during the whole of this period. The non-protective duties were indeed swept away. A few reductions of protective duties were made in the acts of 1870 and 1872; but the great mass of duties imposed on articles which are produced in this country were not touched. It is worth while to note some of the more important classes of goods on which the duties levied in 1864 remained in force, and to compare these duties with the rates of the Morrill tariff of 1861. The increase which was the result of the war will appear most plainly from such a comparison. In the appended table[1] it will be seen that the rates on books, chinaware, and pottery, cotton goods, linen, hemp, and jute goods, glass, gloves, bar- and hoop-iron, iron rails, steel, lead, paper, and silks, were increased by from ten to thirty per cent. during the war, and that the increase then made was maintained without the slightest change till 1883. That these great changes, at the time when they were made, were not intended or expected to be permanent, cannot be denied. An example like that of the duty on cotton goods shows plainly how the duties were

[1] See table III., Appendix.

fixed during the war according to the conditions of the time, and without expectation of their remaining indefinitely in force. The duty on the cheapest grade of cotton tissues had been in 1861 fixed at one cent per yard. During the war the price of cotton rose greatly, and with it the prices of cotton goods. Consequently it is not surprising to find the duty in 1864 to be five cents per yard on this grade of cottons. But shortly after the war, raw cotton fell nearly to its former price; and it does occasion surprise to find that the duty of five cents per yard should have been retained without change till 1883, and even in the act of 1883 retained at a figure much above that of 1861. The duty on cheap cottons happens not to have been particularly burdensome, since goods of this kind are made in this country as cheaply as they can be made abroad. But the retention of the war duty on them, even after it became exorbitantly high, is typical of the way in which duties were retained on other articles on which they were burdensome. Duties which had been imposed during the war, and which had then been made very high, either for reasons of revenue or because of circumstances such as led to the heavy rate on cottons, were retained unchanged after the war ceased. It would be untrue to say that protection did not exist before the great struggle began,—the tariff of 1861, was a distinctly protectionist measure; but it is clear that the extreme protectionist character of our tariff is an indirect and unexpected result of the Civil War.

CHAPTER III.

HOW DUTIES WERE RAISED ABOVE THE WAR RATES.

In the preceding chapter it has been shown how the duties levied during the war failed to be reduced after its close. But in many cases not only has there been a failure to diminish the war rates, but an actual increase over them. We have already noted how the maintenance of the tariff of 1864 brought about gradually a feeling that such a system was a good thing in itself, and desirable as a permanent policy. This feeling, and the fact that Congress and the public had grown accustomed to heavy taxes and high rates, enabled many measures to become law which under normal circumstances would never have been submitted to. In the present chapter we are concerned with the not infrequent instances in which, in obedience to the demands of the protected interests, duties were raised over and above the point, already high, at which they were left when the war closed. The most striking instance of legislation of this kind is to be found in the wool and woollens act of 1867; a measure which is so characteristic of the complications of our tariff, of the remarkable height to which protection has been car-

ried in it, and of the submission of Congress and the people to the demands of domestic manufacturers that it deserves to be described in detail. Such a description is the more desirable since the woollen schedule of our tariff is the one which imposes the heaviest and the least defensible burdens on consumers, and at the same time is the most difficult of comprehension for those who have nothing but the mere language of the statute to guide them.

Wool and woollen act of 1867.

In order to understand the complicated system that now exists, we must go back to the Morrill tariff act of 1861. In that act specific duties on wool were substituted for the *ad-valorem* rates of 1846 and 1857. The cheaper kinds of wool, costing eighteen cents or less per pound, were still admitted at the nominal rate of five per cent. But wool costing between eighteen and twenty-four cents per pound was charged three cents per pound; that costing more than twenty-four cents was charged nine cents per pound. The duties on woollens were increased correspondingly. An *ad-valorem* rate of twenty-five per cent. was levied on them; in addition they paid a specific duty of twelve cents for each pound of cloth. This specific duty was intended merely to compensate the manufacturers for the duty on wool, while the *ad-valorem* rate alone was to yield them any protection. This is the first appearance in our tariff history of the device of exact compensating duties. Compensation for duties on raw materials used by domestic producers had indeed been provided for in

previous tariffs; but it was not until the passage of the Morrill act and of its successors that it came to be applied in this distinct manner. As the principle of compensation has been greatly extended since 1861, and is the key to the existing system of woollen duties, it may be well to explain it with some care.

The compensating system.

It is evident that a duty on wool must normally cause the price of all wool that is imported to rise by the full extent of the duty. Moreover, the duty presumably causes the wool grown at home, of the same grade as that imported, also to rise in price to the full extent of the tax. It is clear that, if foreign wool continues to be imported, such a rise in the price of domestic wool must take place; since wool will not be imported unless the price here is higher, by the amount of the duty, than the price abroad. It may happen, of course, that the tax will prove prohibitory, and that the importation of foreign wool will cease; in which case it is possible that the domestic wool is raised in price by some amount less than the duty, and even possible that it is not raised in price at all. Assuming for the present (and this assumption was made in arranging the compensating system) that domestic wool does rise in price, by the extent of the duty, as compared with foreign wool, it is evident that the American manufacturer, whether using foreign or domestic wool, is compelled to pay more for his raw material than his competitor abroad. This disadvantage it becomes necessary

to offset by a compensating duty on foreign woollens. In 1861 the duty on wool of the kind chiefly used in this country (costing abroad between ten and twenty-four cents a pound) was three cents a pound. The compensating duty for this was made twelve cents a pound on the woollen cloth, which tacitly assumes that about four pounds of wool are used for each pound of cloth. This specific duty was intended to put the manufacturer in the same situation, as regards foreign competition, as if he got his wool free of duty. The separate *ad-valorem* duty of twenty-five per cent. was then added in order to give protection.

The compensating system was retained in the acts of 1862 and 1864. During the war, it is needless to say, the duties on wool and woollens were considerably raised. They were increased, and to some extent properly increased, to offset the internal taxes and the increased duties on dye-stuffs and other materials; and care was taken, in this as in other instances, that the increase in the tariff should be sufficient and more than sufficient to prevent the domestic producer from being unfairly handicapped by the internal taxes. In the final act of 1864 the duties on wool were as follows:

Wool and woollen duties of 1864.

On wool costing 12 cents or less, a duty of 3 cents per pound.
" " " between 12 and 24 cents, a duty of 6 cents per pound.
" " " " 24 and 32 cents, a duty of 10 cents per pound, plus ten per cent.
On wool costing more than 32 cents, a duty of 12 cents per pound, plus ten per cent.[1]

[1] Exactly how this duty on wool of ten per cent. on the value, in addition

The wool chiefly imported and chiefly used by our manufacturers was that of the second class, costing between twelve and twenty-four cents per pound, and paying a duty of six cents. The compensating duty on woollens was therefore raised in 1864 to twenty-four cents per pound of cloth. The *ad-valorem* (protective) duty on woollens had been raised to forty per cent.

During the war the production of wool and woollens had been greatly increased. The check to the manufacture of cotton goods, which resulted from the stoppage of the great source of supply of raw cotton, caused some increase in the demand for woollens. The government's need of large quantities of cloth for army use was also an important cause. After the war, a revolution was threatened. Cotton bade fair to take its former place among textile goods; the government no longer needed its woollens, and threw on the market the large stocks of army clothing which it had on hand. In the hope of warding off the imminent depression of their trade, the wool growers and manufacturers made an effort to obtain still further assistance from the government. A convention of wool growers and manufacturers was held in Syracuse, N. Y., in December, 1865. That both these classes of producers, as a body, understood and supported the views of this meeting, is not at all certain. The mass of wool growers undoubtedly knew

to the specific duty, came to be imposed, the writer has never seen satisfactorily explained. It probably came into the tariff in connection with the discriminating duty of ten per cent. which was imposed on goods imported in the vessels of nations that had no treaty of commerce with us.

nothing of it; they were represented chiefly by a few breeders of sheep. Among the manufacturers, many held aloof from it when its character became somewhat more plain. There is good evidence to show that the whole movement was the work of a few energetic manufacturers of New England, engaged chiefly in producing carpets and worsted goods, and of some prominent breeders of sheep.[1] The fact that the rates of duty, as arranged by the Syracuse convention, were especially advantageous to certain manufacturers—namely, those who made carpets, worsted goods, and blankets,—tends to support this view. On the surface, however, the movement appeared to be that of the growers and manufacturers united. The latter agreed to let the wool producers advance the duty on the raw material to any point they wished; they under-

[1] "This tariff (of 1867) was devised by carpet and blanket makers, who pretended to be 'The National Woollen Manufacturers' Association,' in combination with certain persons who raised fine bucks and wished to sell them at high prices, and who acted in the name of 'The National Wool-Growers' Association.' * * * A greater farce was never witnessed * * * Many who took part in the proceedings of 1866, finding that the Association [of Wool Manufacturers] was used for the convenience of special interests, have since withdrawn."—Harris, "Memorial," pp. 22, 23.

Mr. Harris says elsewhere: "The carpet interest was predominant [in the Wool Manufacturers' Association]. * * * The President was, and is now (1871), a large carpet manufacturer; and the Secretary was a very talented and astute politician, from Washington, chosen by the influence of the President." And again: "The Association having spent considerable sums in various ways *peculiar to Washington* (the italics are Mr. Harris's) increased the annual tax on its members very largely; and at the present time (1871) it is hopelessly in debt to its President."—"Protective Duties," pp. 9, 10; "The Tariff," p. 17. See also "Argument on Foreign Wool Tariff before Finance Committee of Senate," New York, 1871.

took, by means of the compensating device, to prevent any injury to themselves from the high duty on the wool they used. The tariff schedule which was the result of this combination was approved by the United States Revenue Commission.[1] It was made a part of the unsuccessful tariff bill of 1867, already referred to[2]; and when that bill failed, it was made law by a separate act, to whose passage no particular objection seems to have been made. The whole course of events forms the most striking example—and such examples are numerous—of the manner in which, in recent tariff legislation, regard has been had exclusively to the producer. Here was an intricate and detailed scheme of duties, prepared by the producers of the articles to be protected, openly and avowedly with the intention of giving themselves aid; and yet this scheme was accepted and enacted by the National Legislature without any appreciable change from the rates asked for.[3]

We turn now to examine this act of 1867, whose main provisions were retained in the acts of 1883 and 1890, and, after a brief period of radical change under that of 1894,

[1] Mr. Stephen Colwell, a disciple of the Carey protectionist school, was the member of this commission who had charge of the wood and woollens schedule. Mr. Wells, who was also a member of the commission, had nothing to do with this part of the tariff.

[2] *Ante*, p. 21.

[3] The proceedings of the Syracuse convention may be found in full in the volume of "Transactions of the Wool Manufacturers"; also in "U. S. Revenue Report, 1866," pp. 360–419. Mr. Colwell's endorsement of the scheme is also in "U. S. Revenue Report, 1866," pp. 347–356. Mr. Wells, in his report of 1867, sharply criticised the act as passed.

were once more reinstated in the tariff of 1897. In this examination we will follow the statement published in 1866, in explanation of the new schedule, by the Executive Committee of the National Association of Wool Manufacturers.[1] To begin with, the duties on wool were arranged on a new plan. Wool was divided into three classes: carpet, clothing, and combing wool.[2] The first class, carpet wool, corresponded to the cheap wools of the tariff of 1864. The duty was three cents a pound if it cost twelve cents or less, and six cents a pound if it cost more than twelve cents. The other two classes, of clothing and combing wools, are the grades chiefly grown in this country, and therefore are most important to note in connection with the protective controversy. The duties on these were the same for both classes. Clothing and combing wools alike were made to pay as follows:

Act of 1867. Duty on wool.

Value 32 cents or less, a duty of 10 cents per pound and 11 per cent. *ad valorem*.

Value more than 32 cents, a duty of 12 cents per pound and 10 per cent. *ad valorem*.[3]

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[1] See "Statement of the Executive Committee of the Wool Manufacturers Association to the U. S. Revenue Commisson," printed in "Transactions," as above; also printed in "Revenue Report for 1866," pp. 441–460.

[2] Clothing wool is of comparatively short fibre; it is *carded* as a preparation for spinning; it is used for making cloths, cassimeres, and the other common woollen fabrics. Combing wool is of longer fibre; it is *combed* in a combing machine as a preparation for spinning; and it is used in making worsted goods, and other soft and pliable fabrics.

[3] Here again we have the rather absurd combination of specific and *ad-valorem* duties on wool. In the act of 1867, there is the further complication

Comparing these figures with the rates of 1864, one would not, at first sight, note any great change. In 1864, wool costing between twenty-four and thirty-two cents had been charged ten cents per pound plus ten per cent. *ad valorem;* and wool costing more than thirty-two cents had paid twelve cents a pound plus ten per cent. These seem to be almost exactly the rates of 1867. But in fact, by the change in classification, a very considerable increase in the duty was brought about. In 1867 *all* wool costing less than thirty-two cents was made to pay the duty of ten cents per pound and eleven per cent. In 1864 wool costing (abroad) between eighteen and twenty-four cents had been charged only six cents per pound. This is the class of wool chiefly grown in the United States, and chiefly imported hither; and it was charged in 1867 with the duty of ten cents and eleven per cent. With the *ad-valorem* addition, the duty of 1867 amounted to eleven and a half or twelve cents a pound, or about double the duty of 1864. The consequence was that in reality the duty on that grade of wool which is chiefly used in this country was nearly doubled by the act of 1867; and the increase was concealed under a change in classification. The duty on clothing and combing wools, as fixed in

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that the *ad-valorem duty* is in the one case ten per cent., in the other eleven per cent. This difference resulted by accident, as the writer has been informed, from the need of complying technically with certain parliamentary rules of the House. It is hardly necessary to say that this mixture of specific and *ad-valorem* duties on wool has no connection with the compensating system. The compensating scheme accounts only for the two kinds of duties on *woollen goods*.

1867, has been on the average more than fifty per cent. on the value abroad.

The duty on wool being fixed in this way, that on woollens was arranged on the following plan. It was calculated that four pounds of wool (unwashed) were needed to produce a pound of cloth. The duty on wool, as has been explained, amounted to about eleven and one half cents a pound, taking the specific and *ad-valorem* duty together. Each of the four pounds of wool used in making a pound of cloth, paid, if imported, a duty of four times eleven and one half cents, or forty-six cents. If home grown wool was used, the price of this, it was assumed, was equally raised by the duty. The manufacturer in either case paid, for the wool used in making a pound of cloth, forty-six cents more than his foreign competitor. For this disadvantage he must be compensated. Moreover, the manufacturer in the United States, in 1867, paid duties on drugs, dye-stuffs, oils, etc., estimated to amount to two and one half cents per pound of cloth. For this also he must be compensated. In addition he must have interest on the duties advanced by him ; for between the time when he paid the duties on the wool and other materials, and the time when he was reimbursed by the sale of his cloth, he had so much money locked up. Add interest for, say six months, and we get the final total of the duty necessary to compensate the manufacturer for what he has to pay on his raw materials. The account stands:

The duty on woollen cloths.

Duty on 4 pounds of wool at 11½ cents . . .	46	cents
" " oils, dye-stuffs, etc.	2½	"
Interest	4½	"
Total	53	"

Congress did not accept the exact figure set by the woollen makers. It made the compensating duty fifty cents per pound of cloth instead of fifty-three; but this change was evidently of no material importance. The woollen manufacturers got substantially all that they wanted. It will be remembered that in 1864 the compensating specific duty on cloth had been only twenty-four cents per pound.

The *ad-valorem* duty was fixed at thirty-five per cent. The woollen manufacturers said they wanted a "net effective protection" of only twenty-five per cent.[1] This does not seem immoderate. But ten per cent *ad-valorem* was supposed to be necessary to compensate for the internal taxes, which were still imposed in 1867, though abolished very soon after. This ten per cent., added to the desired protection of twenty-five per cent, brought the *ad-valorem*

[1] "All manufactures composed wholly or in part of wool or worsted shall be subjected to a duty which shall be equal to twenty-five per cent. net; *that is*, twenty-five per cent. after reimbursing the amount paid on account of wool, dye-stuffs, and other imported materials, and also the amount paid for the internal revenue tax imposed on manufactures and on the supplies and materials used therefor." Joint Report of Wool Manufacturers and Wool Growers, "Revenue Report, for 1866," p. 430; also in "Transactions." The Executive Committee of the Wool Manufacturers' Association said, in 1866: "Independently of considerations demanding a duty on wool, the wool manufacturers would prefer the total abolition of specific duties, provided they could have all their raw material free, and an actual net protection of twenty-five per cent." Harris, "Memorial," p. 9.

rate to thirty-five per cent. The final duty on woollen cloth was therefore fifty cents per pound and thirty-five per cent. *ad valorem:* of which the fifty cents was compensation for duties on raw materials; ten per cent. was compensation for internal tax; and of the whole accumulated mass only twenty-five per cent. was supposed to give protection to the manufacturer.

This duty was levied on woollen cloths, woollen shawls, and manufactures of wool not otherwise provided for—which included most of the woollen goods then made in this country. On other classes of goods the same system was followed. An *ad-valorem* duty of thirty-five per cent. was imposed in all cases; twenty-five per cent. being intended to be protection, and ten per cent. compensation for internal taxes. The specific duty varied with different goods, but in all cases was supposed merely to offset the import duties on wool and other supplies. For instance, on flannels, blankets, and similar goods, the specific duty varied from fifty cents a pound to twenty cents, being made to decrease on the cheaper qualities of goods, as less wool, or cheaper wool, was used in making a pound of flannel or blanket. The duties on knit goods were the same as those on blankets. On carpets the system was applied with some modification. The specific duty was levied here *by the square yard*, and not by the pound. A calculation was made of the quantity of wool, linen, yarn, dye-stuffs, and other imported articles used for each

Duty on flannels, carpets, dress goods, etc.

yard of carpet; the total duties paid on these materials, with interest added as in the case of cloth, gave the compensating duty per yard of carpet. On this basis, for instance, the specific duty on Brussels carpets was made forty-four cents per yard (the manufacturers had asked for a duty of forty-eight cents); the *ad-valorem* duty of thirty-five per cent. being of course also imposed. In the same way the specific duty on dress goods for women's and children's wear was made from six to eight cents per yard, according to quality. It is evident that the task of making the specific duty exactly compensate for the duties on wool was most complicated in these cases, and that any excess of compensation would here be most difficult of discovery for those not very familiar with the details of the manufacture. As a matter of fact, it is precisely in these schedules of the woollens act that, as we shall see, the "compensating" system was used as a means of securing a high degree of protection for the manufacturer.

These duties, *ad valorem* and specific taken together, have been from fifty to one hundred per cent., and even more, on the cost of the goods. On cloths generally they have been from sixty to seventy per cent. on the value. On blankets and flannels they have been from eighty to one hundred per cent., and have been entirely prohibitory of importation. On dress goods they have been from sixty to seventy per cent.; on Brussels carpets again from sixty to seventy per cent.; and on ingrain carpets from fifty to fifty-five per cent. Yet a net protection of

twenty-five per cent. is all that the manufacturers asked for and were intended to have; and the question naturally presents itself, did they not in fact get more than twenty-five per cent.?

Comment on the *ad-valorem* duty.

The first conclusion that can be drawn from this explanation of the woollens duties is that there was at all events no good reason for the permanent retention of the *ad-valorem* rate of thirty-five per cent. Of that rate ten per cent. was in all cases meant to compensate for the internal taxes. These disappeared entirely within a year or two after the woollens act was passed. Yet the *ad-valorem* rate on woollens remained at thirty-five per cent. without change from 1867 to 1883. Moreover, as the course of the narrative will show, it was steadily raised in later years, from 1883 to 1897, until in the act of 1897 it became as high as fifty-five per cent. There is no more striking illustration of the way in which duties which were imposed in order to offset the internal taxes of the war period, have been retained and have become permanent parts of our tariff system, although the original excuse for their imposition has entirely ceased to exist.

Comment on the specific duties.

It may seem that the retention of the specific duties on woollens was justified, since the duties on wool were not changed. It is true that the duties on dye-stuffs, drugs, and such articles have been abolished or greatly reduced since 1867; but these played no great part in the determina-

tion of the specific duty. The duties on wool were not changed till the passage of the act of 1883. There are, however, other grounds for criticising the specific duties on woollens, which have been in fact not merely compensating, but have added, in most cases, a considerable degree of protection to the "net" twenty-five per cent. which the act of 1867 was supposed to give the manfacturers.

The compensating duties, as we have seen, were based on two assumptions: first, that the price of wool, whether foreign or domestic, was increased by the full extent of the duty; second, that four pounds of wool were used in making a pound of cloth. The first assumption, however, holds good only to a very limited extent. A protective duty does not necessarily cause the price of the protected article to rise by the full extent of the duty. It may be prohibitory; the importation of the foreign article may entirely cease; and the domestic article, while its price is raised to some extent, may yet be dearer by an amount less than the duty. This is what has happened with regard to most grades of wool. The commoner grades of wool are raised in this country with comparative ease. The duty on them is prohibitory, and their importation has ceased. Their price, though higher than that of similar wools abroad, is not higher by the full extent of the duty. It is true that the importation of finer grades of clothing and combing wools continues; and it is possible that the wools of Ohio, Michigan, and other States east of the Mississippi

are higher in price, by the full amount of the duty, than similar wools abroad. Even this is not certain; for the wools which continue to be imported are not of precisely the same class as the Ohio and Michigan wools. As a rule, the importations are for exceptional and peculiar purposes, and do not replace or compete with domestic wools. At all events, it is certain that the great mass of wools grown in this country are entirely shielded from foreign competition. Their price is raised above the foreign price of similar material; but raised only by some amount less than the duty. The manufacturer, however, gets a compensating duty in all cases as if his material were dearer, by the full extent of the duty, than that of his foreign competitor. The bulk of the wool used by American manufacturers does not show the full effect of the tariff, and the manufacturers clearly obtain, in the specific duty, more compensation than the higher price of their wool calls for. The result is that this duty, instead of merely preventing the domestic producer from being put at a disadvantage, yields him in most cases a considerable degree of protection, over and above that given by the *ad-valorem* duty.[1]

There is another way in which the compensating duty is excessive. A very large quantity of woollen goods are

[1] See the instructive remarks of Mr. John L. Hayes, in *Bulletin Wool Manufacturers* vol. xiii. pp. 98–108. *Cf.* "Tariff Comm. Report," pp. 1782–1785. The production and importation of wool in different parts of the country for a series of years are given in some detail in "Tariff Comm. Report," pp. 2435, 2436.

not made entirely of wool. Cotton, shoddy, and other substitutes are in no inconsiderable part the materials of the clothes worn by the mass of the people. In these goods very much less than four pounds of wool is used in making a pound of cloth, and the specific duty again yields to the manufacturer a large degree of protection.

The second assumption of the compensating system. that four pounds of wool are used in making a pound of cloth, is also open to criticism. The goods in which cotton and shoddy are used clearly do not require so much wool. But it is probable that even with goods made entirely of wool, the calculation of four pounds of unwashed wool for each pound of cloth is very liberal. Wool, unwashed, shrinks very much in the cleaning and scouring which it must receive before it is fit for use; and the loss by wear and waste in the processes of manufacture is also considerable. The shrinkage in scouring is subject to no definite rule. In some cases wool loses only forty per cent. of its weight in the process, in others as much as seventy-five per cent. The shrinkage in scouring on American wools is rarely more than sixty per cent; and if to this is added a further loss of twenty-five per cent. in manufacture, there will be needed for a pound of cloth no more than three and one third pounds of wool.[1]

[1] See, as to the loss of wool in scouring, *Quarterly Report Bureau of Statistics*, for quarter ending June 30, 1884, pp. 563–565; Harris, "Memorial," p. 11; Schoenhof, "Wool and Woollens," p. 10; *Bulletin Wool Mf.*, vol. xiii., p. 8. The least loss I have found mentioned is twenty-five per cent. (coarse Ohio), and the highest seventy per cent. (Buenos Ayres wool). Ordinary

With the great majority of goods made in this country, the shrinkage and the loss in manufacture do not amount to more than this. The calculation of four for one is for most American goods a liberal one; and it is evident that the compensating duty, based on this liberal calculation, yields a degree of protection in the same way that it does on goods that contain cotton or shoddy. On the other hand, there are some grades of imported wool on which the shrinkage and loss in manufacture are so great that the compensating duty is not excessive. Some grades of Australian wool, which are imported for manufacturing fine goods and worsteds, are subject to exceptional shrinkage and to exceptional waste in the process of manufacture. Of this class of wool four pounds, and sometimes a little more, are apt to be used for a pound of cloth.[1] In such cases the compensating duty evidently

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American wool loses between fifty and sixty per cent. in scouring. The loss in weight in manufacturing varies much with the processes, but with care will not exceed twenty-five per cent. With most goods it is less.

If the loss in scouring 100 lbs. of wool is sixty per cent., there remain . . . . . 40 lbs. scoured wool
Deduct twenty-five per cent. for loss in manufacture 10 lbs.

Leaves . . 30 lbs. of cloth,

or 1 lb. of cloth for $3\frac{1}{3}$ lbs. of wool.

If the loss in scouring 100 lbs. of wool is sixty-five per cent. there remain . . . . . 35 lbs. scoured wool.
Deduct twenty-five per cent. for loss in manufacture . . . . . $8\frac{3}{4}$ lbs.

Leaves . . . $26\frac{1}{4}$ lbs. of cloth,

or 1 lb. cloth for not quite 4 lbs. of wool.

[1] See the instances given by Mr. Hayes in *Wool Manufacturers' Bulletin*, vol. xii., pp. 4–9. These all refer to Australian wool, which, as Mr. Hayes says elsewhere (*ibid.*, p. 107), is imported in comparatively small quantities for exceptional purposes.

may fail to counterbalance entirely the disadvantage under which the manufacturer labors in the higher price of his raw material; for the wool, being imported into this country, and paying the duty, must be higher in price by the full amount of the duty than the same wool used by the foreign producer. In other words, there are cases where the specific duty is not sufficient to offset the duty on the raw material. It is probable that this fact explains, in part at least, the regular importation of certain dress goods and finer grades of cloths, which continue to come into the country from abroad in face of the very heavy duty. But such cases are exceptional. For most goods made in the United States the compensating duty on the four to one basis is excessive.

One other provision in the act of 1867 may be pointed out, which bears on the calculation of four pounds of wool to one pound of cloth, and at the same time illustrates the spirit in which the act was prepared. It has already been said that the duty on wool is laid on *unwashed* wool; and the compensating duty is fixed on the calculation that it requires four pounds of unwashed wool to make a pound of cloth. The act of 1867 provided that clothing wool, if washed, should pay double duty, and if scoured, treble duty. Similarly combing wool and carpet wool were made to pay treble duty if scoured. But no provision whatever was made as to combing and carpet wools if *washed;* they were admitted at the same rate of duty whether washed or unwashed. This amounted practically

to lowering the duty on them. The provision was of no small importance in the case of combing wools; for these always come to market in the washed condition, and would have been regularly subject to double duty if treated as clothing wool was. It was alleged in justification of their more liberal treatment that a double duty on them would have been virtually prohibitory. Very likely this was the case; and, regarded by itself, the arrangement made in the act of 1867 (and retained in all later acts to 1897) was reasonable. But in its train one would have expected a corresponding moderation of the compensatory duties on the goods for which combing wool was used. No such reduction, however, was made; the full compensating duty was imposed; and the *ad-valorem* duty, consequently, was far from indicating the real degree of protection afforded. As it happened, for several years after the act was passed, a turn in fashion brought worsted goods, made with combing wool, into great demand; and during these years certain manufacturers of such goods found their business exceedingly profitable.[1]

If the compensating duty was thus liberal in the case of most woollen goods, and more than liberal in

[1] Under the reciprocity treaty with Canada (1854–1866) wool from that country had been admitted free, and considerable quantities of combing wool had been imported. The loss of this opportunity was one ground why the manufacturers in 1867 were desirous of securing washed wool of this kind without double duty. In 1867–72, there were very heavy imports of combing wool, partly from Canada, mainly from England. In later years, the imports of wool of this class have been small, and the proviso here under discussion has been of minor consequence. Though opposed by the wool-growers, the admission of washed combing wool at the same rate as unwashed was maintained in all the tariff acts from 1867 to 1897.

the case of worsteds, it was to be expected that other schedules where a check was more difficult to apply, would also contain excessive compensation. The specific duty on carpets was levied by the yard; that on Brussels carpets, for instance, was forty-four cents a square yard. Similarly the specific duty on dress-goods was levied by the square yard. That on blankets, flannels, worsteds, yarns, etc., was fixed by the pound, but was made to vary from twenty to fifty cents a pound, according to the value of the goods. The last-mentioned goods, for instance, paid a duty of twenty cents a pound if worth forty cents or less a pound; a duty of thirty cents if worth between forty and sixty cents; and so on. In every case, of course, the *ad-valorem* (nominally protective) rate of thirty-five per cent. was added to the specific duties. It is evidently a very complex problem whether these "compensating" duties represent the exact sum necessary to offset the increased price of materials due to the tariff rates on wool, hemp, dye-stuffs, and other dutiable articles used by manufacturers. We have seen that the movement that resulted in the passage of the act of 1867 was brought about chiefly by the manufacturers of carpets and worsteds. These men adjusted the specific duties, and alone could know with how great accuracy they attained their object of compensation. In some instances it was confessed that there was more than compensation in their scheme; this was admitted to be the case with blankets and dress-goods. On all goods it is

not to be doubted that a liberal allowance was made in favor of the manufacturers, and that the specific rates gave them a certain amount, sometimes a great amount, of pure and simple protection.

The truth is that the wool and woollens schedule, as it was framed in the act of 1867, and as it remained in the successive modifications of later tariff acts, was in many ways a sham. Nominally it limited the protection for the manufacturer to a clearly defined point, indicated by the *ad-valorem* rate. As a matter of fact, no one could tell how much of the different duties was protective, and how much merely compensating. So complicated was the schedule, and so varying were the conditions of trade and manufacture, that the domestic manufacturer himself found it difficult to say exactly how great a degree of encouragement the government gave him. In some cases the effectual protection might be less than the twenty-five (or thirty-five) per cent. which the tariff was supposed to yield. In the great majority of cases it was very much more than this, and was meant to be more. The whole cumbrous and intricate system—of *ad-valorem* and specific duties, of duties varying according to the weight and the value and the square yard—was adopted largely because it concealed the degree of protection which in fact the act of 1867 gave. Duties that plainly levied taxes of 60, 80, and 100 per cent. would hardly have been suffered by public opinion or enacted by the legislature. Probably few members of Congress under-

Congress understood the real nature and bearing of the scheme; and no attempt was made to check the calculations of the woollen manufacturers, or to see whether, intentionally or by accident, abuses might not have crept into their proposals.

Manufacturers not benefited by the act.

The most remarkable fact in the history of this piece of legislation was its failure to secure the object which its supporters had in mind. Notwithstanding the very great degree of protection which the manufacturers got, the production of woollen goods proved to be one of the most unsatisfactory and unprofitable of manufacturing occupations. As a rule, a strong protective measure causes domestic producers to obtain, at least for a time, high profits; though under the ordinary circumstances of free competition, profits are sooner or later brought down to the normal level. But in the woollen manufacture even this temporary gain was not secured by the home producers after the act of 1867. A few branches, such as the production of carpets, of blankets, of certain worsted goods, were highly profitable for some years. These were the branches, it will be remembered, in which the compensating duties were most excessive, and the prominent manufacturers engaged in them had done most to secure the passage of the act of 1867. Profits in these branches were in course of time brought down to the usual level, and in many instances below the usual level, by the increase of domestic production and domestic competition.

The manufacture of the great mass of woollen goods, however, was depressed and unprofitable during the years immediately following the act, notwithstanding the speculative activity and seeming prosperity of that time.[1] It has sometimes been said that this was the effect of the act itself; but other causes, such as the cessation of the the war demand and the increasing use of worsted goods in place of woollen goods, probably suffice to account for the unprosperous state of affairs. It has also been said that the lack of diversity in the woollen manufacture of the United States can be traced to those provisions in the act of 1867 by which particularly high protection was given on the common and cheaper goods; the more so since the high duty on wool has tended to hamper the manufacturer in the choice of his material. No doubt it is true that at present the majority of finer woollen goods are imported, and the manufacture in this country is confined mainly to cheaper grades. The situation is not essentially different from that which we have already described as existing before 1860.[2] But here again too much is ascribed, for good or evil, to the tariff. The

[1] See an instructive article, by a manufacturer, in "Bulletin Nat. Assoc. Wool Mf.," vol. III., p. 354 (1872). "There is one thing that all who are interested in the manufacture will agree to, that for the last five years [from 1867 to 1872) the business in the aggregate has been depressed, that the profits made during the war have been exhausted mainly, and that it has been extremely difficult during all this time to buy wool and mannfacture it into goods and get a new dollar for an old one."—*Cf.* Mr. Harris' pamphlets, cited above.

[2] See above, p. 147.

limited range of the woollen manufacturer is probably due to deeper causes; in part to the adaptability of the domestic wool for making the woollen goods which form the staples of the American manufacture, in part to the fact that the methods and machinery for those goods are fitted to our economic conditions. The causes, in fact, are probably analogous to those which have confined the cotton manufacture within a limited range. But, on the other hand, it is clear that the act of 1867 has not been successful as a protective measure; it has not stimulated the woollen industry to any noticeable degree, nor has it greatly affected the character or extent of the imports. So far as the wool-growers are concerned, it has not prevented the price of wool from declining in the United States, in sympathy with the decline elsewhere; nor has it prevented the shifting of wool-growing from the heart of the country to the western plains, where wool is raised under conditions like those of Australia and the Argentine Republic. The manufacture probably would have been, on the whole and in the long run, more satisfactory to those engaged in it if they had had free wool and if woollens had been charged with no more than the protection of 25 per cent. which the act of 1867 was supposed to give.[1] Some establishments, no doubt, have arisen which could not continue under such a system, and for these temporary provisions should be made if the present duties are swept away.

[1] There is a voluminous literature on the wool and woollens duties. The original scheme was discussed in Mr. Wells's "Report for 1866–67," pp.

The woollens act of 1867 has been discussed somewhat at length because it is the most striking illustration of the manner in which protective duties were advanced after the war at the request of domestic producers. There are not a few other cases in which an increase of duties beyond the level reached during the war was made. After the woollens act, perhaps the most remarkable is the copper act of 1869. Before that year the duty on copper ore had been five per cent., that on copper in bars and ingots had been two and a half cents per pound. Under the very low duty on copper ore a large industry had grown up in Boston and Baltimore. Ore was imported from Chili, and was smelted and refined in these cities. But during the years immediately preceding 1869 the great copper mines of Lake Superior had begun to be worked on a considerable scale. These mines are among the richest sources of copper in the world, and under normal circum-

Copper act of 1869.

50, 60. Further attacks on the scheme will be found in Mr. Wells's "Report for 1869–70," pp. xcii–cv; Wells, "Wool and the Tariff" (1873); Harris, "Memorial to Committee on Ways and Means" (1872); Schoenhof, "Wool and Woollens" (1883). On the other side a steady advocacy of the compound system will be found in the *Bulletin of the Association of Wool Manufacturers*, to which reference will be frequently made in the following pages. Mr. Wells's remarks in 1870 are criticised in the *Bulletin*, vol. ii., pp. 19–34; the changes made in the compound system in 1883 are defended in vol. xiii., pp. 1–13, 89–128; and the changes of 1890, in vol. xx. Compare also the "Examination of the Statements in the Report of the Revenue Commissioner," House Rep., 41st Cong., 2d session, Report No. 72; the "Tariff Commission Report of 1882," pp. 2240–2247, 2411–2440; and the references given on p. 296, *note*, in this volume. Statistics are collected in the *Wool Book* (1893), published by the Wool-Manufacturers' Association, and in the volume on *Wool and Manufactures of Wool* (1894), issued by the Bureau of Statistics, Treasury Department.

stances would supply the United States with this metal more cheaply and abundantly than any other country; yet by virtue of our tariff policy these very mines caused us for many years to pay more for our copper than any other country. The increased production from these mines, with other circumstances, had caused copper to fall in price in 1867 and 1868; and their owners came before Congress and asked for an increase of duties. Copper ore was to pay three cents for each pound of pure copper, equal to twenty-five or thirty per cent., in place of the previous duty of five per cent.; and ingot copper was to pay five cents per pound, instead of two and a half cents. The bill making these changes was passed by both houses. President Johnson refused to sign it, and sent in a veto message, which bore marks of having been composed by other hands than his own. But the President was then perhaps the most unpopular man in the country; Congress had got a habit of overriding his vetoes, and the copper bill was passed in both Houses by the necessary two-thirds vote, and became law.[1] The effect of the higher duty was to accelerate the closing of the smelting establish-

[1] The veto message is in *Congress. Record*, 1868–69, p. 1460. It was written by Mr. David A. Wells, as that gentleman has informed the writer. The character of the bill was made clear enough in the course of the debate, at well as by the veto message. See Brooks's speech, *ibid.*, p. 1462. The manner in which this bill, and others of the same kind, were carried through Congress is illustrated by some almost naive remarks of Mr. Frelinghuysen: "My sympathies are with this bill, as they always are for any tariff bill. I confess, however, that I do not like this system of legislation, picking out first wool, then copper, then other articles, and leaving the general manufacturing interests without that protection to which they are entitled, and thus dividing the strength which those great interests ought to have. But

ments which had treated imported ores, and to aid the domestic producers of copper in pocketing large profits. The displacement of the imported copper by the Lake Superior product would have come in any case; for, as events proved, the sources of supply in this country were rich enough not only to oust foreign competitors at home, but soon to invade the market abroad. With the aid of the duty, the mining companies were able to form a combination which fixed the price of copper within the country at a higher price than that ruling abroad. When it was impossible to dispose of the entire product within the country, large quantities were sent abroad and sold at whatever price could be got,—lower in any case than the domestic price. The great profits secured by those who were shrewd and fortunate in developing the mines were doubtless due in the main to the unsurpassed richness of the copper deposits. But they were increased by the copper duty of 1869; and thus for a series of years the great natural resources of the country became a cause not of abundance and cheapness, but of curtailment of supply and dearness.[1]

Still another instance of the increase of duties since the war is to be found in the case of steel rails. Before 1870 steel rails had been charged with duty under the head of

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still, if a bill is introduced which gives protection to copper, trusting to the magnanimity of the Representatives from the West who have wool and copper protected, I should probably vote for the bill."—*Ibid.*, p. 161.

[1] On the effect of the copper act, see Mr. Wells's Essay, already referred to, in the Cobden Club series, pp. 518–521 *Cf.* the "Report of the Tariff Comm.," pp. 2554–2577. See also Appendix, V., where the total production of copper in each year, prices at home and abroad, etc., are given.

"manufacturers of steel not otherwise provided for," and as such had paid forty-five per cent. The tariff act of 1870 changed this to a specific duty of $1\frac{1}{4}$ cents per pound, or $28 per gross ton. At the time, the change caused an increase, but no very great increase, in the duty. The Bessemer process of making steel had hardly begun to be used in 1870, and the price of steel rails at that time in England was about $50 per ton. The *ad-valorem* rate of forty-five per cent., calculated on this price, would make the duty $22.50 per ton, or not very much less than the duty of $28 per ton imposed by the act of 1870. Between 1870 and 1873, the price of steel rails advanced in England, and the specific duty of $28 imposed in the former year was not higher than the *ad-valorem* rate of forty-five per cent. would have been. But after 1873 the prices of Bessemer steel and of steel rails steadily went down. As they did so, the specific duty became heavier in proportion to the price. By 1877 the average price of steel rails in England was only a little over $31 per ton; and since 1877 the English price has not on the average been so high as $28 per ton. The duty of $28, which this country imposed, therefore became equivalent to more than one hundred per cent on the foreign price. The result of this exorbitant duty was an enormous gain to the producers of steel rails in the United States. The patent for the use of the Bessemer process was owned by a comparatively small number of companies; and these companies, aided by a

Steel rails, 1870.

patent at home and protected by an enormous duty against foreign competitors, were enabled for a time to obtain exceedingly high prices for steel rails. During the great demand for railroad materials which began on the revival of business in 1879, and continued for several years thereafter, the prices of steel rails were advanced so high that English rails were imported into this country even though paying the duty of one hundred per cent. During this time the price in England was on the average in 1880 about $36 per ton, and in 1881 about $31 per ton. In this country during the same years the price averaged $67 and $61 per ton. That is, consumers in this country were compelled to pay twice as much for steel rails as they paid in England. Any thing which increases the cost of railroad-building tends to increase the cost of transportation; and a tax of this kind eventually comes out of the pockets of the people in the shape of higher railroad-charges for carrying freight and passengers. The domestic producers of steel rails secured enormous profits, of one hundred per cent. and more on their capital, during these years. These profits, as is always the case, caused a great extension of production. The men who had made so much money out of Bessemer steel in 1879–81 put this money very largely into establishments for making more steel. New works were erected in all parts of the country. At the same time the demand fell off, in consequence of the check to railroad-building; and the increased supply, joined to the small demand, caused

prices here to fall almost to the English rates. But during the years of speculation and railroad-building the tariff had yielded great gains to makers of steel rails; and popular feeling against this state of things was so strong that in 1883 Congress felt compelled, as we shall see, to make a considerable reduction in the duty.[1]

Marble, 1864 and 1870.

Still another case, and one which bears some resemblance to the woollen act of 1867, is to be found in the change of the duty on marble, which was made in 1870. The duty on marble had been put in 1864 at fifty cents per cubic foot, and twenty per cent. in addition. This, it may be remarked, is one of the not infrequent cases in which our tariff has imposed, and still imposes, both *ad-valorem* and specific duties on the same article. No compensating principle, such as is found in the woollen schedule, explains most of these mixed duties; and it is hard to find any good reason for retaining them, and giving the customs authorities the task of assessing the duty both on value of the article and on its weight or measure. The cause of their retention, there can be little doubt, is that they serve to conceal the real extent of the duties imposed. The duty on marble, for instance, had been thirty per cent. in 1861, and had been raised to forty per

[1] The effect of the steel-rail duty is discussed more in detail in Mr. J. Schoenhof's "Destructive Influence of the Tariff," ch. vii. On the profits made by the manufacturers, see Mr. A. S. Hewitt's speech in Congress, May, 16, 1882, *Congress. Record*, pp. 3980–83; also printed separately. *Cf. infra*, p. 94, and figures of production, prices, etc. in Appendix, VI.

cent. in 1862. The mixed duty put on in 1864 was equivalent to eighty per cent. and more.[1] A direct increase of the duty from forty to eighty per cent. would hardly have been ventured on; but the adoption of the mixed duty veiled the change which was in fact made. One would have supposed that this rate of eighty per cent. would have sufficed even for the most ardent supporter of home industries; but in 1870 a still further increase was brought about. It was then enacted that marble sawed into slabs of a thickness of two inches or less should pay twenty-five cents for each superficial square foot, and thirty per cent. in addition; slabs between two and three inches thick should pay thirty-five cents per square foot, and thirty per cent.; slabs between three and four inches thick should pay forty-five cents per square foot, and thirty per cent.; and so on in proportion. Marble more than six inches thick paid at the old rate of fifty cents per cubic foot, and twenty per cent. It is evident that the change made in the duty on marble in slabs caused a great increase. The duty on the thinnest slabs (two inches or less in thickness) became $1.50 per cubic foot, and thirty per cent. in addition; this same

[1] The duty of 1864 was fixed, as Mr. Morrill then explained, in accordance with an arrangement made between the importing merchants and "the gentlemen in Washington in the marble-quarry interest." The latter were Mr. Morrill's constituents. It did not seem to occur to that gentleman that the persons who were to pay for the marble should be regarded at all. Originally Mr. Morrill had even proposed a duty of seventy-five cents per cubic yard, with twenty per cent. in addition. See *Congr. Globe*, 1863–64, pp. 2746-2747.

marble had hitherto been admitted at fifty cents per cubic foot, and twenty per cent. The new rates of 1870 were equivalent to between 100 and 150 per cent. on the value, and proved to be practically prohibitive. The effect of the marble duty and of the change made in it in 1870 can be understood only by those who know the circumstances under which marble is produced and imported in this country. The only marble imported, and that which alone is affected by the duty, is fine marble used for ornamental purposes in mantel-pieces, furniture, grave-stones, etc. Such marble comes into use very largely in the shape of slabs of a few inches in thickness. The marble is imported, notwithstanding the heavy duty, from Italy, whence it is brought cheaply by ships that have taken out grain and other bulky cargoes. It is produced in the United States in a single district in Vermont. The owners of the marble quarries in this district had their product raised in price almost to the extent of the duty of 80 or 150 per cent. The result was to make these quarries very valuable pieces of property, and to put very handsome profits into the pockets of their owners; profits which represent practically so much money which Congress ordered those who used ornamental marble to pay over to the quarry-owners.[1]

Wool and woollens, copper, steel rails, marble, which we have now considered, are sufficient examples of the man-

[1] In regard to the duty on marble, see "Tariff Commission Report," pp. 227, 1560, 1648.

ner in which duties, already raised to high figures during the war, were still further increased after the war, for the benefit of the domestic producers. Other instances could be given in which an equal disregard of the consumer and taxpayer has been shown. The duty on flax, the raw material of a manufacture not over-prosperous, had been $15 per ton in 1864; in 1870 it was raised to $20 on undressed flax, and to $40 on dressed flax. Nickel had been admitted free of duty in 1861, and had paid only fifteen per cent. by the act of 1864. In 1870 the duty was suddenly made thirty cents per pound, or about forty per cent. on the value. Nickel, like marble, is produced in only one locality in this country. There exists a single nickel mine, in Pennsylvania, owned by a well-known advocate of protection, and, with the aid of the tariff, this mine, doubtless, has yielded the owner very handsome returns.[1] Examples need not be multiplied. Enough has

Other examples, flax, nickel.

[1] Mr. Joseph Wharton, of Philadelphia, is the owner of the nickel-mine, and has appeared frequently before Congressional Committees in advocacy of this duty and of others. See the "Tariff Commission Report," pp. 201–204. A heated controversy on this subject was raised by Mr. Wharton's pamphlet, "The Duty on Nickel" (Philadelphia: 1883), with which may be compared the remarks of Mr. D. A. Wells, in the *Princeton Review*, July, 1883, pp. 8–11.

In the years after 1870, the nickel situation was affected, first, by the discovery of rich mines in New Caledonia, controlled by a French Company; and next, about 1889, by the discovery of a rich mine in Canada. The Pennsylvania mine seems to have shown signs of exhaustion, and its owner advocated the admission of nickel ore and matte at a low rate of duty, with the retention of the duty on nickel itself for the protection of the works which had been put up to refine the Pennsylvania nickel. See the statements of Mr.

been said to show how the increase of duties of which the war was the immediate occasion, continued after the war had ceased.

The retention of the high duties of the war is to be explained by the pressure of other problems, the fear of infringing on vested rights and interests, the powerful opposition which is always met in withdrawing public bounty when once it has been conferred. To explain the additions to the protective system made after the war, by measures like the woollens act of 1867 and the copper act of 1869, some regard must also be had to the influence of private interests in Congress. The details of these acts, and of other acts passed since the war, have undoubtedly been settled in large part by men who had a direct pecuniary interest in securing an increase of the duties. It is highly improbable that bribery, direct or indirect, was ever used to affect tariff legislation. But it may be fairly said that a general laxity of opinion on the duties of public men enabled provisions to find their way into tariff legislation which could not have been carried through in a more healthy state of affairs. The demoralization has shown itself quite as strikingly in other parts of federal legislation as in tariff matters; it has shown itself most strikingly of all in some State legislatures and in municipal administration. During the period immediately after the war, the state of things was probably

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Wharton and others in the Senate "Tariff Testimony" of 1888–89, pp. 1347–64, and in the House "Report on the Revision of the Tariff," 1890, pp. 1153–1161.

worse than at any other time in our history. The redundant currency promoted speculation and gambling; jobs were plenty and lobbyists strong; some legislators thought it not improper to become "interested" in enterprises which their votes might affect, and few Congressmen hesitated to advocate measures that would put money in the pockets of influential constituents. Conditions of this sort account largely for the higher duties of the years after the war. It cannot be said that there was any consistent policy or sustained public opinion in favor of extending the protective system.

CHAPTER IV.

THE TARIFF ACT OF 1883.

THE tariff act of 1883 made the first general revision since the Civil War, apart from the abortive horizontal reduction of 1872. After the crisis of 1873, little or nothing was heard about the tariff. Currency questions came into prominence during the period of depression. The successful resumption of specie payments in 1879, and the revival of prosperity which set in at the same time, finally diverted public attention from the monetary situation; and the same set of causes contributed to centre attention once more on the tariff system. The revival of activity in 1879 and the years following caused a great increase in imports, and so a great increase in the customs revenue. For several years after 1879, the surplus revenue was on the average over a hundred millions annually. The redundant revenue compelled a revision of the customs duties, and it was inevitable that not only the financial but the economic aspects of the tariff should once more become prominent.

The connection between tariff legislation and the state of the revenue has indeed been almost constant in our history. In 1842 an empty treasury was followed by the pas-

sage of a high protective tariff. In 1857 an overflowing revenue caused a reduction of the duties. In 1861 the Morrill tariff was passed, partly in order to make good a deficit. During the war the need of money led to the act of 1864. The ten per cent. reduction of 1872 was called out largely by the redundant revenue; its abolition in 1875 was excused by the falling off in the government income. The protectionist acts of 1824 and 1828 and the so-called revenue act of 1846, stand practically alone as general measures little affected by the state of the revenue at the time. Since the Civil War, the financial situation has usually given the occasion for changes in the tariff rates; and this is true of the act of 1883, as well as of the acts of 1890 and 1897.

Agitation on the tariff renewed.

In 1882 Congress passed an act for the appointment of a Tariff Commission, which was to report at the next session of Congress what changes it thought desirable. The majority in Congress then was protectionist, and of the gentlemen appointed by the President on this commission a majority were advocates of high protection; while no member could be said to represent that part of the public which believed a reduction of the protective duties to be desirable. Mr. John L. Hayes, the secretary of the Wool Manufacturers' Association, was president of the commission. Its report was laid before Congress at the beginning of the session of 1882–83. At first no action on this report or on the tariff seemed likely to be taken; for the House, in which revenue bills must originate, was unable to agree on any

Tariff Commission of 1882.

bill. But the House having passed a bill for the reduction of some of the internal taxes, the Senate tacked to this bill, as an amendment, a tariff bill, based, in the main, on the recommendations of the Tariff Commission. When this bill came before the House the protectionists again succeeded, as in 1872, in obtaining a parliamentary victory. By an adroit manœuvre they managed to have it referred to a conference committee.[1] In this committee the details of the tariff act were finally settled; for the bill, as reported to the Senate and House by the conferees of the two bodies, was passed by them and became law. The object of the manœuvre was to check the reduction of duties as it appeared in the Senate bill; and this object was attained. The changes made by the conference committees were, as a rule, in a protectionist direction. The duties

Act of 1883; how passed.

[1] This manœuvre was a curious example of the manner in which the rules of Congress are manipulated in order to affect legislation. A two-thirds vote, by the existing rules, was required to bring the Senate bill before the House. A two-thirds majority in favor of the bill could not be obtained; though it was probable that on a direct vote a majority in its favor could have been got. The protectionists wished to have the bill referred to a conference committee, which would probably act in the direction desired by them. For this purpose a resolution was introduced by Mr. Reed, of Maine, providing for a new rule of the House, by which a bare majority was to have power to take up a bill amended by the Senate for the purpose of non-concurrence in the Senate amendments, *but not for the purpose of concurrence*. By the passage of this rule a majority of the House could take up the tariff bill, and then refuse to concur in the Senate amendments; but under this rule the amendments could not be concurred in. There was, consequently, no possibility of passing the tariff bill in the shape in which it came from the Senate. The bill had to be referred to a conference committee; and in that committee, as the text states, the details of the bill were settled. The Reed rule, though made a permanent rule of the House, was passed merely in order to attain this object.

on a number of articles were raised by the committee above the rates of the Senate bill, and even above the rates which the House had shown a willingness to accept. The consequence was that the tariff act, as finally passed, contained a much less degree of reduction than the original Senate bill; and it was passed in the Senate only by a strict party vote of 32 to 31, while the original Senate bill had been passed by a vote of 42 to 19.[1]

In taking up the provisions of the act of 1883, it will be best to consider first those cases in which an increase in the duties was made. Changes of this sort were made in a considerable number of cases, and are significant of the general character of the measure. To begin with, the duties on certain classes of woollen goods were raised.

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[1] Mr. Morrison, in 1884, said: "The office and duty of a conference committee is to adjust the difference between two disagreeing houses. This House had decided that bar-iron of the middle class should pay $20 a ton; the Senate that it was to pay $20.16 a ton. The gentlemen of the conference committee reconciled this difference—how? By raising bar-iron [of this class] above both House and Senate to $22.40. The Tariff Commission reported that the tariff on iron ore should be 50 cents a ton. The Senate said it should be 50 cents a ton. The House said it should be 50 cents a ton. Gentlemen of the conference committee reconciled the agreement of the House, Senate, and Tariff Commission into a disagreement, and made the duty on iron ore 75 cents a ton. The gentlemen of the conference did a similar service for the great corporation of corporations, the Iron and Steel Association, by giving it a tax of $17 on steel rails, which the House had fixed at $15 and the Senate at $15.68 per ton." Quoted in Nelson's "Unjust Tariff Law," pp. 22, 23. *Cf.* remarks to the same effect by Senator Beck, who was a member of the conference committee.—*Cong. Record*, 1883–84, p. 2786.

The conferrees for the Senate were Messrs. Morrill, Sherman, Aldrich, Bayard, and Beck; for the House, Messrs. Kelley, McKinley, Haskell, Randall, and Carlisle. All but three (Bayard, Beck, and Carlisle) were strong protectionists.

On most woollens the figures were lowered; though, as will be seen, the reduction in these cases was not such as to bring any benefit to consumers. But on certain classes of woollens, on which a reduction of duty, if made, would have been of real importance, the duties were advanced. This was the case with dress goods made wholly of wool. Under the act of 1867 such goods had paid a maximum duty of eight cents per yard and forty per cent. The forty per cent. rate on these goods had already been above the general *ad-valorem* duty of thirty-five per cent. established by the act of 1867. Nevertheless the act of 1883 increased the duty on these goods to nine cents a yard and forty per cent. The Tariff Commission had even recommended twelve cents a yard and forty per cent. Goods of this class were, and still are, the largest single item in the importations of woollens into the United States. They are made to no very great extent by the domestic manufacturers. The new duty was intended to enable the latter to engage profitably in making them; since the old duty, though it amounted in all to more than sixty-five per cent. on the value of the imports, had not sufficed for this purpose. The increase in the specific duty was not supposed to be necessary to give more effective compensation for the wool duty; in fact, as we shall see, the duty on wool was slightly lowered, so that the compensating duty, if changed at all, should have gone down. The new duty was a concession to the demand of the manufacturers for still further protection.[1]

[1] The Tariff Commission, in its "Report" (p. 31), said: "The new clause in relation to all-wool merino goods is a new provision, and has in view the

It did not attain its object; all-wool dress goods continued to be imported, and few, if any, were made at home; and in time a still further increase of duty was asked, and at last was granted in the tariff act of 1890.

Next to dress goods, such as were discussed in the preceding paragraph, the class of woollens of which the importations were largest were the finer grades of cloths and cassimeres. The importation of these went on steadily in large quantities. Their production was carried on in this country only to a limited extent. It is not surprising, therefore, to find here also a rise of the rates in the act of 1883. Cloths were divided into two classes: those costing more and those costing less than eighty cents per pound. The latter, costing less than eighty cents, were admitted, as before, at an *ad-valorem* duty of thirty-five per cent. But the former, costing more than eighty cents per pound, were made to pay forty per cent. The specific compensating duty was reduced somewhat in both cases, in connection with the lower duties on wool, which will presently be discussed; but the *ad-valorem* rate, that which is avowedly protective, was increased. This increase also did not have the desired effect; importations continued in large volume; and here again a further advance in duties was asked and obtained in 1890.

A change of almost the same kind was made in the

introduction of fabrics never yet successfully made in this country. Many of these goods constitute staple fabrics * * * and their manufacture would be a desirable acquisition to our national industry." The duties of the act of 1883 on wool and woollens were discussed in detail by Mr. Hayes in *Bulletin Wool Mf.*, xiii., 1–13, 89–128.

duties on cotton goods. Here also the duty was lowered on the common grades of goods; and on these grades the reduction was again a purely nominal one. But on other grades of cotton goods, whose importation still continued, and on which a decrease in the duty would have caused some lowering of prices and relief from taxation, there was no reduction, but an increase. The duty on cotton hosiery, embroideries, trimmings, laces, insertings, had been thirty-five per cent. under the old law. In the act of 1883 it was made forty per cent. The duty of thirty-five per cent. had been imposed during the war, in 1864, at a time when raw cotton was taxed, and the manufactured cotton also paid a heavy internal tax. This rate had remained unchanged from 1864 till 1883, notwithstanding the abolition of the internal taxes. The importance of the new duty of forty per cent. is clear only when we know that imports of cottons consist chiefly of goods of the class on which the duty is raised. About two thirds of the cottons imported became subject to the increased duty.

The process by which the protective system has gradually been brought to include almost every article, whatever its character, whose production in the country is possible, is illustrated by the history of the duty on iron ore. This most raw of raw materials had paid in 1861 a duty of ten per cent. as an unenumerated article; and the rate had not been changed during the war, since the article was not one likely to be imported or to yield revenue. In 1870, when the protective principle, as we have seen,

was applied with greater strictness in various directions, the duty was raised to twenty per cent. In later years iron ore began to be imported in considerable quantities, especially from Spain; and the duty was raised in 1883 to seventy-five cents per ton, or about thirty-five per cent. on the value.

Still another instance of the advance of duties in the new act was in the rates on certain manufactures of steel.

Steel.

Here, as has so often happened, the increase was concealed under what was in appearance merely a change in classification. The duties on steel ingots, bars, sheets, and coils had been, until 1883, those fixed in the tariff of 1864,—from two and one quarter cents to three and one half cents per pound, varying with the value of the steel. The act of 1883 reduced these duties slightly, making them from two to three and a quarter cents per pound. But previous to 1883 "steel, in forms not otherwise specified," had been admitted at a duty of thirty per cent. Under this provision, which had been in force since 1864, a number of articles, like cogged ingots, rods, piston-rods, steamer shafts, and so on, had paid only thirty per cent. The act of 1883, however, specificially enumerated these and other articles, and put them in the same schedule with steel ingots and bars,—that is, compelled them to pay a duty of from two to three and a quarter cents a pound. The effect was a considerable rise in the duties on the newly enumerated articles.

These examples indicate the mode and the extent in which the protective system was extended in the act of

1883. As a rule, duties were advanced on protected articles of which importations continued in considerable volume. The advance was by no means universal, being affected, as our tariff legislation so often has been, by the haphazard manner in which the details of the measure were finally settled. But it was made in so large a number of important cases as to give the act a distinctly protectionist flavor. Such extensions of the protective system probably were not at that time expected or desired by the public. The Tariff Commission had been given the task of revising the tariff "judiciously." The rates recommended by it were declared to effect a general reduction of twenty per cent. or more, and the declared object of the leaders in the dominant party was to make a reform in the tariff system. Reform then was still understood to mean reduction, and real reduction, in the protective duties; and an actual increase in rates, such as we have seen on cottons, woollens, and other articles, was no part of what the public expected or the act professed to do. In truth, these changes were made in good part without plan or consistency, as so many details have been settled in our statutes: a result inevitable from the absence, in our system, of concentrated responsibility for the details of legislation. Some advances were proposed by the Tariff Commission, others by the House and Senate Committees; some by amendments in the House, others by amendments in the Senate; not a few, as was noted above, were finally settled in the Conference Committee. In many cases, they were half concealed by changes in

classification, or coupled with reductions of other articles in the same schedules. Had a separate bill been brought forward, proposing the higher duties contained in the act, it certainly could not have passed.

We may turn now to an examination of the cases in which duties were reduced in 1883.

The schedules in the tariff which have the greatest effect on the welfare of the country are those fixing the duties on iron and wool; and to these we will first give our attention. The change in the duty on wool was sufficiently simple. The *ad-valorem* rate was taken off. The duty of 1867, it will be remembered, had been, on wools costing less than thirty-two cents, ten cents per pound plus eleven per cent. *ad valorem*, and, on wools costing more than thirty-two cents, twelve cents per pound plus ten per cent. *ad valorem*. These *ad-valorem* rates of eleven and ten per cent. were taken off, and the rates left simply at ten and twelve cents per pound. In regard to the greater part of the wools raised in the United States, this reduction was purely nominal. It left the duty on the cheaper grades of wool, raised in Texas and in the Territories, at a point where it was still entirely prohibitory. So far as concerns the higher grades of wools, such as are raised in Ohio and neighboring States, the reduction was real, though so small in amount that it practically left the situation unchanged.[1] On carpet wools the duty was

[1] The duty in the act of 1883 was ten cents on wool costing *thirty* cents or less, and twelve cents on that costing more than thirty cents. The change (in the line of division, according to value) from thirty-two to thirty cents was not without importance; and, as far as it went, it evidently tended to neutralize the reduction. See the *Bulletin Wool Mf.*, xiii., 11, 109.

reduced from the former rates of six and three cents a pound, to five and two and a half cents. These wools are practically not raised in the United States at all; and the reduction on them was again real, though slight.

On the whole, the changes in the duty on this raw material indicated a desire to make concessions to the opponents of protection. Greater reductions would probably have been made but for the fear of arousing among the wool growers a feeling of opposition to the protective system as a whole. Little can be said in favor of the duty on wool; and even on strictly protectionist grounds much can be said against it. Notwithstanding the cumbrous machinery of compensating duties, it undoubtedly has a hampering influence on the wool manufacture, and has been one factor, though perhaps not the most important, in confining this industry to the limited range that is so often complained of. As a tax on raw materials, it tends to bear with heavier weight than would be the case with the same duty on a finished product; since it is advanced again and again by the wool dealer, the manufacturer, the cloth dealer, the tailor, each of whom must have a greater profit in proportion to the greater amount of capital which the wool duty and the higher price of wool make it necessary for him to employ. So strong and so clear are the objections to duties of this kind that hardly another civilized country, whatever its general policy, attempts to protect wool.[1]

[1] Not only England, but countries like France, Germany, Austria, Italy, which have applied protective duties in recent years, admit wool free.

Moreover, the reduction of a duty of this kind can take place with exceptional ease. Wool is not produced, as a rule, in large quantities, by persons who devote themselves exclusively to this as a business. It is mainly produced by farmers, whose chief income comes from other sources, and on whom a reduction of duty and a fall of price would fall with comparatively little weight. In the Western States and Territories, it is true, wool is grown on large sheep ranches, by producers with whom it is not a subsidiary business. But the qualities of wool grown there are least affected by the duty. While the price of Territory wools is probably higher than the price of similar wools abroad, it is by no means higher by the full extent of the duty. The argument for the consideration of vested interests is consequently less strong than in the case of manufactures in which a large plant is invested, and where the interests of a large body of workmen are involved in the retention of things as they are.

We turn now to the reductions of duty on woollen goods, which would naturally follow the lower duty on wool. It has been seen that the *ad-valorem*, or protective, duty was not decreased at all, and that on the finer classes of woollens it was increased from thirty-five to forty per cent. But the specific, or compensating, duty was reduced from fifty cents to thirty-five cents a pound. The woollens duty of 1883 was thirty-five cents a pound and thirty-five per cent. on goods costing less than eighty cents per pound, and thirty-five cents

Woollens.

and forty per cent. on goods costing more than eighty cents. The lowering of the specific duty was in part called for by the reduction of the duty on wool; but the decrease was somewhat larger than the reduced duty on the raw material made necessary. The compensating duty in the new act was fixed on the assumption that no more than three and one half pounds of wool are used in making a pound of cloth; whereas the act of 1867, it will be remembered, was framed on the basis of four pounds of wool to the pound of cloth. This may be called a tacit confession that the compensating duty of 1867 had been excessive; and the new arrangement took away some of the protection which was formerly given by the specific duty. But the changes were more nominal than real. So far as the finer grades of woollens were concerned, it was more than offset by the increase in the *ad-valorem* duty from thirty-five to forty per cent. So far as the cheaper grades of woollens were concerned, it had no real effect. The duty on these was prohibitory before, and it remained prohibitory. Such a change has no effect on trade or prices, and brings no benefit to consumers. Precisely similar is the state of things in regard to flannels, blankets, and similar goods. On these also the specific duty was reduced, on the cheapest grades from a rate of twenty cents a pound to rates of ten and twelve cents. But the new rates were still high enough to shut out importation, and brought about no change beyond that of the figures on the statute-book.[1]

[1] Complaint was made that the act of 1883 reduced the duties on goods more than the duties on wool. See Mr. Hayes's articles in *Bulletin*

Changes of precisely this kind are to be found in other parts of the act of 1883. The rates on the cheap grades of cotton goods, for instance, show a considerable reduction. On the lowest class of unprinted goods the duty had been five cents per yard ; it was made two and one half cents. But the old duty had for many years ceased to have any appreciable effect on the prices of cotton goods. The common grades of cottons can be made, as a rule, as cheaply in this country as anywhere in the world ; in fact, some of them are regularly exported in large quantities. If the duty on such cottons were entirely abolished, it is probable that they could not be imported ; and it is certain that a very small duty would suffice to shut out from our market all foreign competitors in them. Under these circumstances a reduction of duty like that of 1883 could be of no effect whatever. The same holds good of almost all the various reductions in the specific duties on plain and printed cotton goods.

Cottons.

Wool Mf., vol. xiii. This was certainly the case with worsted goods, which were admitted at specific duties not sufficient to compensate for the duties on wool. The mistake in adjusting these duties was made by Mr. Hayes himself, in the bill framed by the Tariff Commission. It led to a long struggle on the part of the manufacturers to get a construction of the act of 1883 making worsteds dutiable as woollens. The Democratic administration of 1885–89 refused to adopt such a construction ; the Republican administration in 1889 did so, but the courts, when a case was tried before them, promptly decided that the remedy was not to be found by misconstruing the statute ; and in 1890 a special act was passed, in advance of the general tariff act of that year, making worsteds dutiable as woollens. A good brief statement of this episode is in the *Report of the Secretary of the Treasury for 1887*, p. 35. The *Bulletin Wool Mf.* is full of it from 1886 to 1889, and a detailed account of the last steps in 1889 is in vol. xx. The special act is in 26 *Statutes at Large*, 105.

These changes also were nominal. On the other hand, in the case of the finer cotton goods, laces, and trimmings, on which a lowering of the rates would have been of real effect, there was, as we have seen, no decrease, but an increase.

Iron.

The duty on pig-iron was reduced from $7.00 to $6.72 a ton. This change was insignificant, hardly two per cent. on the foreign price of iron. A greater could have been made without danger of any disturbance of the iron trade. The same was the case with the reduction on bar-iron, which, on the ordinary grade, lowered the duty from one cent a pound to eight tenths of a cent. The reduction still left the duty high enough to prevent any lowering of prices and any effect on trade. The duties on the various forms of manufactured iron—hoop, band, sheet, plate iron—went down in much the same way. The reductions were slight in all cases, and often merely nominal. In general, the new rates on iron and its manufactures were such as to have no appreciable effect on the trade and welfare of the country.

Steel rails.

The duty on steel rails showed a considerable reduction. The old rate had been $28 a ton; the new one was $17. If this change had been made four or five years earlier, it would have been of much practical importance; but when made, it had no effect whatever. It has already been said that, after the enormous profits made by the steel-rail makers in 1879–1881, the production in this country was greatly increased. At the same time

the demand from the railroads fell off, and the huge quantities which the mills were able to turn out, could be disposed of, if at all, only at prices greatly reduced. The consequence was that the price of rails, which in 1880 was higher than the English price by the full extent of the duty of $28, fell rapidly after 1881, and brought the American price in 1885 to a point but little above the English. The new duty of 1883 was under these circumstances still prohibitory. In 1887, when a revival of railway building set in, the price of rails again went up. It is probable that at this time, when there was an active demand for rails, the decline of the duty to $17 was of real effect, preventing the American price from rising as high as it would have gone if the old duty had been retained. But the demand fell off quickly after 1887; the American price fell correspondingly, and soon became lower than the English price by an amount much less than the duty of $17. With the possible exception of the year 1887, the duty of $17 was as much a prohibitory one as the old duty of $28 had been, and the reduction on the whole was as much nominal as those in other parts of the iron schedule.[1]

Analogous in its effects to the reduction on steel rails was that on copper. The duty on this article went down from five cents, the rate imposed in 1869, to four cents a pound. The duty on copper had enured to the benefit of the owners of the copper mines of Lake Superior,

[1] For figures as to the production and prices of steel rails, see Appendix VI.

aiding them to combine and fix the price of copper without fear of competition from abroad. The great profits of their mines caused them steadily to increase their product; and although much of their surplus was disposed of abroad, at prices lower than those demanded at home, the growing supply caused the domestic price slowly to fall. The discovery of large deposits of copper, in latter years, in Montana and Arizona, and the shipment to market of a great deal of copper from these sources, broke for a while the monopoly of the Lake Superior combination, and caused the price to go down still farther. Importation of copper in any considerable quantities ceased many years ago. The steady increase in the domestic supply brought the price to a point but little above the foreign price. The maintenance of the duty still enabled the combined copper producers at times to secure a higher price than they could have got without the duty; but under ordinary conditions the enormous quantities of copper yielded by the mines compelled a price to be accepted virtually as low as the foreign price.

The cases of copper and steel rails are sometimes referred to as successful applications of protection to young industries. On the surface, the object of such protection seems here to have been obtained. That the price of these articles fell after the duty was imposed, indeed proves nothing; for their prices fell the world over. But their prices fell faster than in foreign countries, and fell nearly, if not quite, to the foreign level; and a price as

low as the foreign price, or lower, is the object sought by protection to young industries. This result, however, was not the consequence, in the case of copper certainly, of any stimulus given by the duty to improved methods of production. It was the result of the extraordinary richness of the copper mines, whose discovery and use was not affected by the duty, and would have brought the price down even sooner had it not been for the duty. The duty, so far from stimulating the fall in price, checked it. Much the same is true of steel rails. To be sure, here there seems to have been some stimulus to invention, and some advance by American works over the processes in use abroad; but in the main the decline in the price of rails has been due to improvements common to all countries, to the discovery of rich beds of iron ore on Lake Superior, and not least to the decline in the cost of transporting and bringing together the coal and ore for making the Bessemer iron,—factors not perceptibly affected by the duty.

Other reductions in the act of 1883 may be briefly noted. The duty on marble was fixed at sixty-five cents per cubic foot on rough marble, and at $1.10 per cubic foot on marble sawed, dressed, and in slabs. This was a slight decrease from the compound duties discussed in the preceding chapter.[1] The duty on nickel was put at fifteen cents a pound, in place of the previous duty of twenty and thirty cents a pound. Practically all the nickel imported had come in at the duty

Other reductions.

[1] See p. 224.

of twenty cents; consequently the reduction was less considerable than it appeared at first sight to be. A change of greater importance was the reduction of the duty on silks from sixty to fifty per cent. In part, it is true, this was again a merely nominal change, many silk goods being as effectually kept out by a duty of fifty per cent. as by one of sixty. But a large quantity of silks were steadily imported; on these, and on goods of the same sort made in the country, the lowering of the duty meant a real decline in the burden of taxation. The situation as to silk goods is more fully discussed in later parts of this volume, and need not now further engage our attention. The reduction of 1883 was as great as could have been expected, and was in marked contrast with the advances made in the duties on finer cotton and woollen goods. The same contrast appears in the reduction of the duty on finer linens from forty to thirty-five per cent. On a considerable number of other articles also reductions were made; the reductions being usually slight, yet sufficient in number to indicate a disposition to concede something to those who called for a curtailment of the protective duties.

Wheat, corn, etc.

The duties on a number of agricultural or mainly agricultural products, such as beef and pork, hams and bacon, lard, cheese, butter, wheat, corn, and oats were left unchanged in the act of 1883. The duty on barley was somewhat lowered at the request of the brewers of beer; and that on rice also was slightly reduced. But almost all of these products were

charged with the same rates as in previous years. It is needless to say that the duties on them have no effect whatever, except to an insignificant extent on the local trade across the Canadian border. The duties were left unchanged in order to maintain the fiction that the agricultural population secured through them a share of the benefits of protection. The reductions in this schedule, on barley and on rice, affected almost the only products on which the duties in fact were of any advantage to the agricultural producer or of any disadvantage to the consumer. In this regard, as in others, there was a sharp contrast between the legislation of 1883 and that which followed it in 1890 and 1897.

Enough has been said of the details of the act of 1883. Its general character cannot be easily described ; in truth, it can hardly be said to have any general character. On the whole, it may be fairly described as a half-hearted attempt on the part of those wishing to maintain a system of high protection, to make some concession to a public demand for a more moderate tariff system.[1] Some duties were increased, some lowered ; nor was any consistent policy followed. Some raw materials, like

[1] Mr. John L. Hayes, the President of the Tariff Commission, writing more particularly of the new duties on wool and woollens, said, shortly after the passage of the act : " Reduction in itself was by no means desirable to us ; it was a concession to public sentiment, a bending of the top and branches to the wind of public opinion to save the trunk of the protective system. In a word, the object was *protection through reduction.* We were willing to concede only to save the essentials both of the wool and woollens tariff. * * * We wanted the tariff to be made by our friends."—*Bulletin Wool Mf.*, xiii., 94.

wool and pig-iron, were admitted at slightly lower rates; others, like iron ore, were charged with higher rates. The same incongruities appear in the duties on more finished goods; though as to these it may be said that the reductions were generally nominal, rarely of real effect. Looking at the tariff system as a whole, it retained, substantially unchanged, the high level of duties reached during and after the Civil War. No new line of policy was entered on, in one direction or the other; and it remained for the act of 1890, the next step in our tariff history, to begin a sharp and unmistakable movement in the direction of still higher protection. That measure will be the subject of the next chapter.

CHAPTER V.

THE TARIFF ACT OF 1890.

AFTER the passage of the tariff act of 1883 few persons would have expected, for a long series of years, a further extension of the protective system. Nevertheless, a marked increase of duties was made, within a few years, in the act of 1890, familiarly known as the McKinley tariff act: a measure which marks a new phase in our tariff history and in the protective controversy.

In the years immediately succeeding the passage of the act of 1883, several unsuccessful attempts were made to amend it.[1] In 1884, Mr. Morrison, of Illinois, introduced a bill by which a general reduction of twenty per cent., and the entire remission of duties on iron ore, coal, lumber, and other articles, were proposed. Mr. Morrison may have been moved to advocate the plan of a "horizontal" reduction by the example which had been set in 1872; and doubtless he was also influenced by the circumstance that the protectionists themselves had arranged the details of the act of 1883, and could not complain of disproportionate reductions, or of a disturbance of relative rates,

[1] An account of these attempts is given by Mr. O. H. Perry in the *Quarterly Journal of Economics* for October, 1887, vol. ii., pp. 69–79.

under a plan which affected all articles equally. Nevertheless, the proposal met with vehement opposition not only from the Republicans, but from a strong minority in Mr. Morrison's own party. It was disposed of on May 6, 1884, by a vote (156 to 151) striking out its enacting clause. Two years later, in the Forty-ninth Congress, a similar disposition was made of another bill introduced by Morrison. The proposal of 1886, however, was different from that of 1884, in that it made detailed changes in the duties. Lumber, salt, wool, hemp, flax, and other articles were put on the free list; the duty on woollens was made thirty-five per cent., the specific duties on woollens being removed with the duties on wool; and reductions were proposed on cottons and on sugar. The bill never was discussed in Congress, for Mr. Morrison's motion to proceed to its consideration was defeated by a vote of 157 to 140, and during the rest of the session no further attempt was made to take it up. Early in the next session, in December, 1886, a motion was again made to proceed to the consideration of revenue bills, and again was defeated.[1]

With the session of 1887–88, however, the tariff controversy entered on a new phase. President Cleveland's

[1] Some other measures of less significance were also introduced in these years, such as a bill of 1884, to restore the duties of 1867 on wool, which was defeated by a close vote of 126 to 119, and bills introduced by Messrs. Randall and Hiscock in 1886. Mr. Randall's bill proposed the removal of internal taxes on tobacco, fruit brandies, and spirits used in the arts, entire remission of duties on lumber, jute butts, and a few minor articles, and a slight reduction of some other duties. Mr. Hiscock's bill proposed similar changes in the internal taxes, and a large reduction of the duty on sugar,

annual message to Congress, in December, 1887, was devoted entirely to the tariff, and urged vigorously a general reduction of duties, and more especially the removal of duties on raw materials. Mr. Cleveland's decided and outspoken attitude had the effect of committing his party unreservedly to a policy of opposition to the existing protective system, and so of making this question more distinctly a party matter than it had been at any time since the Civil War. It is true that in the campaign of 1884 the Republicans had put forward the tariff question as the main issue on which they wished to stand before the country; but in that year the personal qualifications of Mr. Blaine for the Presidency played an important part in the election, which therefore could not be said to turn simply on the tariff issue. Moreover, within the Democratic party there was then an active minority opposed to the policy of tariff reduction favored by most of the Democrats. This minority had been strong enough to defeat Mr. Morrison's tariff bill of 1884. On the measure of that year, while 151 Democrats voted in the affirmative, 41 voted in the negative, and, with the aid of a compact Republican vote in the negative, put an end to the bill. The strength of this element in the Democratic party had declined somewhat in later years; but in December, 1886, at the opening of the short session 1886–87,

with a bounty to American sugar-makers. Both of these bills, which indicated the manner in which the protectionists tried to grapple with the problem of reducing the revenue, were referred to the Committee of Ways and Means, and, not being reported from that body, never came to a vote in the House.

26 Democrats out of 169 voting were still recorded in opposition to the tariff reform measure then under consideration.[1] In the new Congress, whose first session opened with Mr. Cleveland's message on the tariff, the situation was changed. The Mills bill, so-called, prepared during that session, was passed by the Democrats in the House distinctly as a party measure; out of 169 Democrats voting all but four voted for it. The Republicans were as unanimous in voting against it, and, by way of counter manifesto, prepared in the Senate, where they had a majority, a bill for changing the tariff system in the direction of further protection. The position of both parties was in this way sharply defined, and in the campaign of 1888 the tariff question was the issue squarely presented.

Neither the Senate bill prepared by the Republicans, nor the Mills bill prepared in the House by the Democrats, was expected to reach the stage of enactment. Both served simply to give concrete expression to the principles of the two parties. The Mills bill reduced the duty on pig-iron to $6.00 a ton, fixed the duties on cottons at 35 or 40 per cent. (all specific duties on cottons being abolished), and made reductions of a similar sort, not often great in themselves, but significant in principle, on other manufactures. The incisive changes were on raw materials. Hemp, flax, lumber were to be admitted free. Most important of all, wool was put on the free

[1] Tables on the votes, by States, on the bills considered between 1883 and 1887 will be found in Mr. Perry's article in the *Quarterly Journal of Economics*, just referred to.

list; a change naturally accompanied by the proposal to abolish the specific or compensating duties on woollen goods. The Senate bill, on the other hand, proposed distinctly a further extension of the protective system. A considerable number of duties were raised, especially on manufactures of which imports continued in large volume, like finer cottons and woollens. On a few articles concessions were made, as in the free admission of jute, and a small reduction of the duty on steel rails. In the crucial case of wool, the Senate bill provided for a slight increase above the rates of 1883, both on clothing and carpet wools, and for a corresponding advance in the specific duties on woollens; these changes being accompanied in some cases by an increase in the *ad-valorem* duties on these goods.

The victory of the Republicans in 1888, and the election of President Harrison, were the results of the issue thus placed before the voters. The election was won by a narrow margin, and was affected by certain factors which stood apart from the main issue. The independent voters had been disappointed with some phases of President Cleveland's administration of the civil service, and many who had voted for him in 1884, did not do so in 1888. In New York, whose vote was practically decisive, political intrigues helped to turn the scale. On the whole, however, the Republicans held their own, and even made gains, throughout the country, on the tariff issue; and they might fairly consider the result a popular verdict in favor of the system of protection. But their opposition

to the policy of lower duties, emphasized by President Cleveland, had led them not only to champion the existing system, but to advocate its further extension, by an increase of duties in various directions. This they had proposed in the Senate bill of 1888, and had pledged themselves to effect in the debates of the campaign. Accordingly when the Congress then elected met for the session of 1889–90, the Republican majority in the House proceeded to pass a measure which finally became the tariff act of 1890. This measure may fairly be said to be the direct result of Mr. Cleveland's tariff message of 1887. The Republicans, in resisting the doctrine of that message, were led by logical necessity to the opposite doctrine of higher duties, and felt compelled, for the sake of party consistency and political prestige, to pass a tariff measure of some sort. But for the agitation which set in during the session of 1888, it is probable that they would have been disposed to leave the tariff as it stood in the act of 1883. As it was, notwithstanding grave misgivings on the part of some of their leaders, especially those from the northwest, the act known popularly as the McKinley bill was pushed through after long and wearisome debates, and finally became law in October, 1890. To some of the details of this important measure we may now turn.

The wool and woollens schedule had become the most important and most sharply debated part of the tariff system, and the changes made in it by the act of 1890 deserve careful attention. On wool, the division into three classes, clothing, combing, and carpet wool, was

retained, and the changes in duty were in the main significant from their direction rather than from their amount. The duties on clothing and combing wool, it will be remembered, had been slightly lowered in 1883 ; they were slightly raised in 1890. That on clothing wool went up from ten to eleven cents per pound ; on combing wool from ten to twelve cents. The change was meant to put the wool duties where they had been before 1883, and to placate certain malcontents who ascribed a fall in the price of wool to the reduction of duty of that year. The decline in price was undoubtedly due to other causes, and indeed was much greater than could have been accounted for by the slight reduction of 1883 ; while the change in duty in 1890 was too small to have any serious effect beyond emphasizing the determination of the Republicans to yield nothing on this part of the protective system. So far as the difference in rate between clothing and combing wool goes (eleven cents on the one, twelve on the other), it is difficult to see what was gained. The distinction between the two classes is largely nominal, many kinds of wool being available either for carding or for combing, and the difference in the duties was in any case too slight to have any appreciable effect. Apparently, it served simply to cause needless complication in administering the collection of duties.

On carpet wools, a more radical change was adopted, more radical at least in form. As has been observed elsewhere, the conditions in regard to carpet wool are peculiar. Practically no wool of this grade is grown in

the United States. It is of a coarse quality grown mainly in countries like Asia Minor, India, Russia, and the Argentine Republic, from which it is imported into the United States in large quantities. The reason why it is not grown in advanced communities like the United States, Australia, England, France, Germany, is very simple. With the same labor and attention required for carpet wool, the grower in civilized communities, by care and intelligence in the breeding and management of sheep, can secure a better quality of wool, commanding a higher price; accordingly he confines himself to the more profitable sorts. The demand for an increase in the duty on carpet wool was based on a suspicion that wool, properly belonging to the clothing or combing class, had been entered as carpet wool, and so had escaped the higher duty. Probably some part of the imported carpet wool is in fact used in making cloths; but the fraction is small, and can have no appreciable effect on the price of domestic clothing wool. The endeavor to increase the duty naturally was opposed by the carpet manufacturers, and led to an acrimonious discussion in the committee-rooms between them and the advocates of the supposed interests of the farmers. The result in the McKinley act was a compromise. The carpet-wool duty was made *ad valorem* instead of specific, varying from thirty-two per cent. to fifty per cent.; the change to the *ad-valorem* method being intended to make the duty adjust itself automatically to the quality and value of the wool.[1] Obviously

[1] The change in duty is most easily explained by putting together the rates under the acts of 1883 and 1890.

the change in one respect was objectionable: it brought with it the temptations to fraud and undervaluation which are inevitable under *ad-valorem* duties. With it there went some other provisions which made the new duties more rigorous than they seem to be on their face. Thus, if any carpet wool should be improved at all by an admixture of merino or English blood, it became dutiable as clothing or combing wool. If any bale stated by the importer to be dutiable under one class, contained any wool of another class, the whole bale was dutiable at the highest rate. If any wool had been sorted or increased in value by the rejection of any part of the original fleece, it was subject to double duty. Some of these provisions were framed in ambiguous language, giving occasion for troublesome litigation and uncertainty as to the real effect of the legislation. But all were objectionable to those who imported and used carpet wool, and emphasized the policy of keeping that article within the protective system. Yet if there is any article as to which that system does not attain its object, it is carpet wool. None is grown in the country, and none is likely to be; it is a raw material for an important manufacture; its free admission would harm no vested interest.

Turning now to the duties on manufactures of wool,

In 1883 carpet wool,
if worth 12 cents or less per pound, paid 2½ cents.
" more than 12 cents, " 5 "
In 1890 carpet wool,
if worth 13 cents or less per pound, paid 32 per cent. *ad valorem*.
" more than 13 cents, " 50 " " "
Most carpet wool is worth ten cents a pound or more; consequently the new *ad-valorem* rates meant, in almost all cases, an increase on the duty.

we find a further development in the direction taken in 1883; namely, a development toward greater complications in the already complicated scheme of duties built up in the act of 1867. It will be remembered that in 1883 the duty on woollen cloths proper, the central point in the wool and woollens schedule, had been changed from the uniform rate fixed in 1867 to rates varying with the value of the goods. In the act of 1890 the policy of varying rates was advanced still further. The mode in which these duties developed cannot be better exhibited than in tabular form, thus:

DUTIES ON WOOLLEN CLOTHS.

IN 1867,	IN 1883,	IN 1890.
50 cents per lb., plus 35 per cent.	(1) If worth 80 cents or less per lb., 35 cents per lb., plus 35 per cent. (2) If worth more than 80 cents per lb., 35 cents per lb., plus 40 per cent.	(1) If worth 30 cents or less per pound, 33 cents per lb. plus 40 per cent. (2) If worth between 30 and 40 cents per lb., 38½ cents per lb., plus 40 per cent. (3) If worth more than 40 cents per lb., 44 cents per lb., plus 50 per cent.

It will be seen that the act of 1890 reduced slightly the specific duty on the cheapest woollens, those costing 30 cents or less per pound. This is another tacit admission, similar to that made in the act of 1883, that on cheap goods the old compensating duty had been excessive. The *ad-valorem* rate on these goods was raised to forty per cent. No pretence was now made of limiting the net protection supposed to be given by the *ad-valorem* duty, to that mod-

erate rate of twenty-five per cent. which had been the nominal object of the original compound scheme of 1867. On the second class of goods, costing between 30 and 40 cents a pound, there was an increase over the rates of 1883 both in the specific and in the *ad-valorem* duties. Finally, on the third class under the new act, woollens costing over 40 cents, the increase in duties was marked: the specific duty was 44 cents a pound, and the *ad-valorem* duty went up to fifty per cent. On ready-made clothing the duties were higher still, being fixed at 49½ cents a pound, plus sixty per cent.

There are two features in this rearrangement of the duties on woollens which call for comment. In the first place, the compensating duty on the cheaper goods was on the face of it made excessive. Thus, on goods valued at between 30 and 40 cents a pound the compensating duty was fixed at 38½ cents. The compensation was simply for the rise in the price of wool used by the American manufacturers, due to our duty on imported wool. This extra expense to the domestic manufacturer, in the higher price of wool, was assumed, by the terms of the act, to be as great as the total cost of making the same woollen goods for the foreign manufacturer,—wool, wages, and everything else. But the foreign goods were valued at between 30 and 40 cents a pound, which means that they cost about so much; while the duty which compensated the American producer was 38½ cents a pound. As will be presently explained, this extraordinary compensating duty was more nominal than real, since no classes of

goods to which it would apply are likely to be imported. But it was none the less an anomaly.

The second feature to be noted is connected with the first. It is the new dividing point in the valuation and classification of woollen cloths: the maximum duty being no longer on goods worth over 80 cents per pound, but on goods worth over 40 cents. The change obviously served to increase the duties more than would appear at first sight; since goods worth between 40 and 80 cents now paid not the lowest, but the highest duty. The effect of the new classification in fact was that all cloths imported must pay the highest rate. The imports of woollens are chiefly of the finer qualities. When the act of 1883 was passed, it was probably expected that few woollens of the lower class then provided for (namely, those worth less than 80 cents per pound) would be imported. In the first years after 1883, this was the case. But as time went on, a growing proportion of woollens came in at the lower value and the correspondingly lower duty; until in 1889 a good part of the cloths imported were classified at the lower rate. This unexpected development was due partly to a decline in the price of wool after 1883; partly to improvements in manufacturing which made it possible to produce goods more cheaply; and partly, no doubt, to the temptation to make goods, and perhaps also undervalue them at the custom-house, in such manner as to bring them in at the lower rate of duty. At all events, the act of 1890 was so arranged as to put an end to this importation of woollens at the lower end of the schedule. To all intents and purposes it has made

all woollen goods likely to be imported at all, subject to the maximum rate of duty.[1]

Next we may consider the duties on women's and children's dress goods. The duties on these had already been raised in 1883 above the rates of 1867; in 1890 they were further raised. As in the case of cloths for men's wear, the increase took place partly by direct advance in the rates, partly by a shifting of the classification. The compensating duty on these goods, it will be remembered, had been from the first arranged by the yard, and not by the pound. The changes in duty can again be best presented in tabular form.

DUTIES ON DRESS GOODS.

IN 1883.	IN 1890.
(1) Worth 20 cents a yard or less: duty, 5 cents a yard, plus 35 per cent.	(1) Cotton warp, worth 15 cents a yard or less: duty, 7 cents a yard, plus 40 per cent.
(2) Worth over 20 cents a yard: duty, 7 cents a yard, plus 40 per cent.	(2) Cotton warp, worth over 15 cents a yard: duty, 8 cents a yard, plus 50 per cent.
(3) Made wholly of wool: duty, 9 cents a yard, plus 40 per cent.	(3) If the warp contains any wool: duty, 12 cents a yard, plus 50 per cent.

[1] The imports of woollen cloths during the period in which the act of 1883 was in force were as follows (the figures denote thousands of dollars):

	Worth 80 cents or less.	Worth over 80 cents.
Fiscal Year 1884,	$243,000	$12,974,000
" 1885,	213,000	9,867,000
" 1886,	314,000	9,151,000
" 1887,	713,000	9,309,000
" 1888,	1,073,000	9,778,000
" 1889,	1,125,000	8,133,000

During that part of the fiscal year 1890-91, when the duties of the act of 1890 were in force, the imports of woollen cloths were,

The specific duty on the lowest class went from 5 cents to 7; the *ad-valorem* duty from 35 to 40 per cent. In the middle class the rates advanced from 7 to 8 cents, and from 40 to 50 per cent. The line of division by value went down from 20 to 15 cents, so that a larger proportion of the goods come in under the middle duty of 8 cents plus 50 per cent. On the third class, the rates went up in similar proportions,—from 9 to 12 cents, and from 40 to 50 per cent. One other effective change was made, indicated in the tabular statement, but deserving more detailed description. In 1883 the third class, in which the duties were highest, included goods made wholly of wool, and these only. In 1890, certain goods of mixed materials were transferred to it. The first two classes included, in 1890, fabrics "of which the warp consists *wholly* of cotton or other vegetable material." Consequently the third class included such as have a warp containing any fraction of wool; and these mixed goods, as well as goods made entirely of wool, become subject to the new maximum duty of 12 cents per yard, plus 50 per cent.

The changes on dress goods are undoubtedly those of greatest practical effect in the wool and woollens schedule.

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(1) valued at 30 cents or less per pound $1,248
(2) valued at between 30 and 40 cents 49,925
(3) valued at over 40 cents 6,303,500

Practically all were valued at over 40 cents, and so paid the maximum rate of 44 cents per pound, plus 50 per cent. Reduced to an *ad-valorem* equivalent, this was a duty of about 92 per cent. On the few goods of the second class imported (worth between 30 and 40 cents) the duty was 143 per cent.

The importation of these goods into the United States is enormous: having ranged between fifteen and twenty millions of dollars' worth annually in the years since the act of 1883. It is natural that those who held to the principle of protection should endeavor to check them. There had been a tendency, similar to that noted in the case of woollen cloths, though not so marked, for a growing importation of the cheaper goods (valued at less than 20 cents a yard under the act of 1883); and this contributed to the change in valuation and description in the new act. By the act of 1890, these fabrics were subjected in almost all cases to the maximum duty, equivalent to over one hundred per cent. on their foreign value.[1] It is surprising that imports continue in face of a duty so very high; yet continue they do, indicating that not only the imported fabrics, but the domestic fabrics of the same sorts, are raised in price for the consumer by the full extent of the duty. The explanation of the steady inflow of these goods, and the inability of the American manu-

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[1] In that part of the fiscal year 1890–91 in which the new duties were in force, the imports of the three classes of dress goods were:

(1) valued at 15 cents or less (duty 7 cents plus 40 per cent.) $768,000
(2) valued at more than 15 cents (duty 8 cents plus 50 per cent.) 845,000
(3) if the warp contains any wool (duty 12 cents plus 50 per cent.) $5,281,000

On goods of the third class, the duties collected were $5,423,000, making 103 per cent. of their value.

It should be noted that dress goods exceeding a certain weight (four ounces a square yard) are treated like men's woollens and are subjected to the maximum duty on these,—44 cents a pound plus 50 per cent.

For a statement of the grounds from the protectionist point of view, for these very high duties, see an article by Mr. William Whitman, in the *Bulletin of the Wool Manufacturers*, vol. xx., pp. 283–304.

facturers to supplant them, is probably to be found largely in the peculiarities of their manufacture, and the difficulty of adapting it to American conditions: factors in our industrial situation which will be discussed in the closing chapter of this volume.[1]

In other parts of the wool and woollens schedule there were similar changes. Some of the higher duties were merely nominal. Thus the duty on ingrain carpets, which had been 12 cents a yard plus 30 per cent. in 1883, went up to 19 cents plus 40 per cent.; that on Brussels carpets, from 30 cents plus 30 per cent. to 44 cents plus 40 per cent. The duty on these had been prohibitory before; the changes served simply to make them more prohibitory, and were of no practical effect whatsoever. Other changes were, like the higher duties on dress goods, of real importance, such as the increase in the duties on knit goods and underwear. Of these the imports also are considerable, and a change in duties consequently has a material effect on industry and prices. The patience of the reader would be needlessly taxed by a further consideration of these details. Enough has been said to indicate the character of the wool and woollens schedule of the act of 1890; we may pass to other parts of the measure.

Among textiles cotton goods come next in importance to woollens in our tariff system. On the cheaper grades of cotton cloths, the duties, which had already been reduced in 1883, were still further lowered. Thus, on

[1] See below, pp. 299–315.

the cheapest grade of unbleached cottons, the duty decreased from $2\frac{1}{2}$ to 2 cents a yard. These, however, are goods which are manufactured in the United States as cheaply as in foreign countries, and which we are more likely to export than import. The duties were and are nominal, and the change went no further than a revision of certain unimportant figures in the statutes. On goods whose importation had continued under the act of 1883, and on which the duties had been of real importance, the changes were in the other direction. On the highest grade of cotton prints, the duty went up from 6 to $6\frac{3}{4}$ cents a yard; with the further proviso that goods valued at over 15 cents a yard, on which the duty had before been 40 per cent., now became subject to one of 45 per cent. In the drag-net clause, fixing the duty on cotton manufactures not elsewhere provided for, the old rate of 35 per cent. was replaced with one of 50 per cent. Some duties were changed from *ad-valorem* to specific with the effect of raising them materially. Thus, on cotton cords and braids, the former rate of 35 per cent. became one of 35 cents per pound, equivalent to about 60 per cent. The most striking change, however, was in the case of knit goods and stockings. On cotton stockings, the act of 1883 had collected a uniform rate of 40 per cent. This was replaced in 1890 by a complicated system of graded duties, partly specific and partly *ad-valorem*, and varying with the assessed value of the goods. The new rates can again be best described by a statement in tabular form:

If the value is	60c.	or less	a dozen,	the duty is	20c.	a dozen,	plus	20	per	ct.
" "	betw. 60c.	& $2.00	" "	"	50c.	" "		30	"	"
" "	betw. $2.00	" $4.00	" "	"	75c.	" "		40	"	"
" "	over $4.00		" "	"	$1.00	" "		40	"	"

Knit goods of cotton, and more particularly cotton stockings, are imported in large amounts, the annual value of the imports having been hitherto between six and eight millions. Most of these were of the second class in the schedule just given, dutiable at 50 cents a dozen plus 30 per cent.,—equivalent, on the average, to about 70 per cent. on the value. The raw material here is cheaper in the United States than abroad, and it is surprising that so heavy a duty should have been considered necessary to encourage the domestic manufacture. The explanation of the continued large imports is apparently to be found in part in a great advance in foreign methods of production, due to the newly invented or newly improved machinery, the use of which has not yet been introduced into this country. In part the explanation lies doubtless in the fact that the finer cotton stockings are made on knitting frames with a large use of hand labor. At all events, the changes just noted present as extreme a case of the application of protection as is to be found in our legislation.

On linen goods, of which only the coarsest qualities have been made in the country, the finer being all obtained by importation, the duty went up from 35 to 50 per cent. Linen laces and embroideries were advanced from 30 to 60 per cent. On silks the general duty remained as before, at 50 per cent.; on silk laces

and embroideries it went up to 60 per cent. Plush goods of all sorts, whether made of silk, cotton, or wool, were subjected to very high rates. A complicated scheme of duties was adopted, partly specific and partly *ad-valorem*, and varying with the value of the goods; the system being similar in its construction to that already described as to cotton hose, and bringing about duties of 60 and 70 per cent. on the value. The imports of velvets, plushes, and similar goods, are heavy, and the domestic production is inconsiderable; the rates stand for another determined effort to establish a new manufacture under the shelter of very high duties.[1]

One general characteristic of the McKinley act may here be discussed. It is the great development of the method of minimum valuations and minimum duties substantially similar to that adopted in the tariff act of 1828. This mode of grading the duties was adopted not only in the cases described in the preceding pages—woollen cloths, dress goods, cotton stockings, velvets and plushes—but in other cases also, such as blankets and flannels, boiler and plate iron, penknives and table-knives, shotguns, and pistols.[2] On some of these articles the minimum system had already been adopted in earlier acts; on others it was newly adopted in 1890. The object apparently was to avoid an *ad-valorem* duty, and yet to secure an adaptation of the rate of duty to the value of the article. But, in doing this

[1] The provisions as to velvets and similar fabrics are in sections 350 and 411 of the act.

[2] See sections 138, 165, 167, 170, 393.

the fundamental difficulty of *ad-valorem* duties—the temptation to undervaluation—is met, as was pointed out in the discussion of the act of 1828, in aggravated form.[1] The foreign manufacturer is tempted to make goods so as to bring their value near the minimum points, and the importer is tempted to undervalue them. No doubt another object sought in the minimum system, in 1890 as in 1828, was to conceal the real extent and weight of the duties imposed: a result the more likely to be attained where the duties are not only graded by valuation, but are also mixed specific and *ad-valorem* duties.

The duties on iron and steel would have been thought, in 1870, and even in 1880, the most important parts of the protective system. But in recent years the enormous development of the iron industry in the heart of the country has materially changed the situation. The bulk of the iron in the country is now made of ore mined on the shore of Lake Superior, smelted with bituminous coal mined west of the Appalachian chain. Pennsylvania also contributes its ore, and there has been a striking development of iron-making in the South. Iron smelted with anthracite coal, which played so important a part in our industrial history in the period from 1850 to 1870, has wellnigh disappeared.[2] Most of the production now takes place far from the seaboard, and the greater part of the producers of pig-iron can disregard foreign competition. A lowering of the duty

[1] See pp. 93, 103, above.

[2] The great changes in the iron industry since 1878 can be followed in the Reports of the American Iron and Steel Association. A sketch of the essential features is in the *Quarterly Journal of Economics*, vol. IV., p 498.

on pig-iron to $6.00, the rate which was proposed in the Mills bill of 1888, would have had no appreciable effect in any quarter. The effect of a complete abolition of the duty would be confined mainly to the sea-board districts. These are for all practical purposes nearer to England than they are to the central States, which are now the seat of the greatest domestic production of iron. In the McKinley act, no change in the duty on pig-iron was proposed, and it remains at the old rate, $6.72 a ton.

The situation is much the same in regard to iron ore. The duty on ore is significant only in regard to those grades which contain little phosphorus, and are therefore available for the making of steel by the Bessemer process. The great rich beds of Bessemer ore on the shore of Lake Superior, having easy water communication with the heart of the country, can supply the larger part of the smelters more cheaply than foreign ore could. This ore has made its way far to the eastward, and has been used by establishments very near the sea-board, which, but for the duty, would be likely to use more or less of foreign ore. The eastern establishments which make steel must get their Bessemer ore either by long railway haul from the West, or by importing it subject to duty. Large works have already been established on the Atlantic coast, using ore from Cuba, Elba, and Spain, and therefore desirous of getting ore free.[2] Notwithstanding a strong endeavor from these producers to secure a remission of the duty, it

[1] See the statement of Mr. L. S. Bent before the Ways and Means Committee of 1890, in their hearings "On the Revision of the Tariff," 1890, p. 39

remained in the McKinley act at the old rate, seventy-five cents a ton.

On steel rails the duty was reduced to six-tenths of a cent a pound, or $13.44 a gross ton. This reduction was of the same sort as that made in 1883: it left the duty still at a prohibitory rate. The steady advance in the iron and steel manufacture in the United States, the growth of the West, the discovery of rich sources of iron and coal, above all, the enormous decline in the cost of bringing these materials together, due to the cheapening of railway rates, reduced the price of steel rails as well as of other manufactures of iron. As the figures given in the Appendix show, the price still remained higher in the United States than in England. But cost of transportation from the sea-board to the interior is such that even in the absence of the duty, steel rails would be imported only to supply railways near tide-water. In the main, the steel-rail duty has done its work, for good or ill: it is no longer of great economic importance. The same remark may be made of the duty on copper, which goes down in the act of 1890 to 1¼ cents a pound. Copper would not be imported in any event; its price at ordinary times is not higher in this country than it is abroad; a duty serves only to make it possible for the combination of copper producers, in occasional times of exceptional demand, to keep up the price above the foreign price.

A different aspect of the tariff of 1890 appears in the rise in the duty on tin-plates. This article had never been produced in this country, and had never been sub-

jected to duties comparable to those on other manufactures of iron. In 1862 a duty of twenty-five per cent. had been imposed, and had been retained until 1872, when, at the time of the general reduction of that year, it was lowered to fifteen per cent.[1] In 1875, when the general reduction of 1872 was repealed, the rate was changed to a specific duty of $1\frac{1}{10}$ cents a pound, equivalent to about twenty per cent. at the prices then ruling. But this change did not have any effect in stimulating domestic production, and in 1883 the duty was reduced to one cent a pound, equivalent, at the prices of 1883, to an *ad-valorem* rate of about thirty per cent. At that rate the importations had been very large, twenty millions of dollars and more a year, and the domestic production had been *nil*. The question presented itself squarely whether a further and great extension of the protective system should be made. Those who believed that system to be wise, naturally maintained that this article had been unfairly singled out for a specially low rate of duty; and in the act of 1890 a duty of $2\frac{2}{10}$ cents a pound, equivalent to about seventy per cent., was imposed. The continuance of this duty, however, was made subject to a curious condition, unprecedented in our tariff legislation: that after the year 1896, tin-plates should be

[1] See pages 182–185 above. The language of the acts of 1862 and 1875 was not entirely clear, and in 1878 an attempt was made to have tin-plates classified under another head in the tariff schedules, and so subjected to a higher duty. But Secretary Sherman maintained the interpretation of the statutes which had been followed since 1862, and the duties were collected as stated in the text. See a letter of Secretary Sherman's in the "Tariff Commission Report" of 1882, p. 208.

admitted free of duty, unless the domestic production for some one year before that date should have equalled one third of the importations during any one of the years between 1890 and 1896. In other words, the permanent maintenance of the duty was made conditional on a substantial increase of the domestic production. Obviously, so long as there was no domestic production, the duty had been merely a revenue duty,—an indirect tax of the simplest type, not of the best sort doubtless, but substantially similar in its effects to duties on tea or coffee. The alternative now presented is that it shall either become a protective duty, with the peculiar effects flowing from such, or that it shall cease to be a tax at all.[1]

As to agricultural products, there were some innocuous changes, and some of real importance. The duty on wheat went up from twenty to twenty-five cents a bushel, and that on Indian corn from ten to fifteen cents; changes which obviously could be of no consequence whatever. Equally insignificant in their general effects were the higher duties on potatoes and eggs, which might possibly have some slight effect in checking the border trade between Canada and the Northern States, but in the main must be of petty character. Among changes of greater importance was an increase of the duty on barley

[1] Another proviso of the act of 1890 was of the same sort. After July 1, 1893, a duty of four cents a pound is imposed on tin; with the proviso that this duty shall cease on July 1, 1895, unless in some one year preceding, the domestic production of tin shall have been greater than 5,000 tons. No tin in appreciable quantity has hitherto been made in the country. The imports range between 15,000 and 20,000 tons a year.

from ten to thirty cents a bushel; a change meant to protect the farmers of some Northern States against Canadian barley. Oddly enough, the duty on rice, which, like barley, is imported in considerable quantities, was slightly reduced. On another set of agricultural products there are some changes in the direction of higher duties; namely, on textile materials like hemp and flax. On flax the duty was increased from $20 to $22.40 a ton; on dressed flax, from $40 to $67.20 a ton. On undressed hemp the duty remained unchanged; on dressed hemp it went up from $25 to $50 a ton. For reasons which will be presently set forth, these changes are not likely to have the desired effect of stimulating the domestic production of these fibres. It should be noted that notwithstanding some attempts to get encouragement for the production of jute in the Southern States, that tropical commodity, which we import largely, was relieved from the former duty and admitted free.

We may now turn to another phase of the act of 1890, the remission of the duty on sugar, which was important in its effects on the financial situation, and in its connection with the reciprocity provisions of the act. The duty on sugar had been in the main a revenue duty; for nine tenths of the consumption was and is supplied by importation. Only one tenth of the sugar is made at home, almost exclusively in the sugar-cane district of Louisiana; on this alone could the distinctive effects of a protective duty be felt. Substantially, therefore, the sugar duty presented the same questions as were presented by the

tea and coffee duties in 1872.[1] At the same time, the receipts from sugar were very large. They formed the most important single item in the revenue from customs, and in the period immediately preceding 1890 were on the average about fifty-five millions a year. In that period the United States were embarrassed by a large surplus in the revenue, the situation in this respect being again similar to that in 1870–72. At the same time the duty on sugar, averaging about two cents a pound on the grades chiefly imported, was high, considered simply as a tax and without regard to its connection with the general financial and economic situation. The Mills bill of 1888 had proposed a reduction of about fifteen per cent.; the Senate bill of the same year proposed to cut the rate to about one half that then in force. There was general agreement that some reduction should be made.

The McKinley act went further: it admitted all raw sugar free. On refined sugar a duty of one half cent per pound was retained, by way of protecting the domestic sugar refiners. This duty was open to the objection of playing into the hands of the Sugar Trust, which had just reached the stage of controlling practically the entire sugar refining of the country. Undoubtedly it did; but the previous tariff system, by making the duty on refined sugar higher than that on raw sugar, had done the same; and the act of 1890 left the situation as it was, simply maintaining for good or ill a policy as to the sugar refiners which had been followed for a generation or more.

[1] See above, pp. 186–189.

With the free admission of raw sugar came a bounty to the domestic sugar producers at the rate of the former duty, two cents a pound. There would have been an obvious inconsistency in leaving the sugar producers to their fate, at a time when other domestic producers were receiving increased protection. Moreover, there was a disposition to assist and stimulate the production of sugar in other ways, especially from beets. The bounty was accordingly given, at the rate of two cents a pound, on all domestic sugar, for the period from July 1, 1891, to July 1, 1905. The change in one sense is immaterial to the domestic sugar producer. He must sell his sugar at a lower price, but gets a bounty which makes up the loss. But so far as ease of collection goes, the bounty clearly is less advantageous than the duty was. The benefit of the duty came to him without trouble, in the shape of a higher price. The benefit of the bounty he can secure only by a process, somewhat troublesome and not unattended with expense, of filing descriptions and statements at government offices, securing licenses, and submitting to the regulations which the government must of necessity prescribe to prevent fraudulent use of the bounty provisions.

So far as the financial object in view was concerned, the sections on sugar accomplished their object. Indeed, perhaps they more than accomplished it. The remission of the duty cut off fifty or sixty millions of revenue; the bounty called for an extra expenditure of six or eight millions. The act also reduced the internal tax on tobacco from eight cents to six cents a pound; and the same Con-

gress that passed it increased the appropriations in several directions, especially for more liberal pension payments. It would certainly have been wiser financial policy to be content with a reduction of the sugar duty such as was proposed in the Senate bill of 1888–89. Those who oppose the protective system on principle naturally objected to the financial effects of the sugar remission on still another ground—it left the hands of Congress less free to deal with the more distinctly protective duties. Such duties as those on wool, flax, hemp, lumber, iron ore, and similar materials, are more burdensome in character than was the sugar duty; but the remission of these taxes is much more difficult in the face of a deficit than of a surplus.

The complete remission of the duty on sugar was undoubtedly determined on as a means of gaining popularity for the new tariff act in the West, where the higher duties on manufactured articles might be difficult to present in an attractive light. The same object was had in view in another set of provisions, closely connected with the new sugar schedule,—the reciprocity provisions. The trend of public opinion on the tariff bill, while it was under discussion in the House, made some of the Republican leaders uneasy as to its effects on the party prospects in the West; and this feeling was strong with Mr. Blaine, not the least shrewd of the Republican leaders. The bill had passed the House of Representatives without the reciprocity provisions; they were inserted at the last moment in the Senate, almost under pressure from Mr.

Blaine and those who shared his views. The effect of these provisions was to give the President power to impose by proclamation certain duties on sugar, molasses, tea, coffee, and hides, if he considered that any country exporting these commodities to the United States "imposes duties or other exactions on the agricultural or other products of the United States, which, in view of the free introduction of sugar, molasses, tea, coffee, and hides into the United States, he may deem to be reciprocally unjust or unreasonable." [1]

This particular mode of reciprocal engagement has a distinct economic advantage over the ordinary form of reciprocity. The ordinary form consists in the simple remission of duties to a favored country, duties remaining on goods coming from countries not favored. Such a remission is likely not to redound to the advantage of the domestic consumer. Unless the favored country can easily supply the whole market, or other countries are quickly admitted to the lower duties, prices are not affected, and the foreign producer reaps the whole benefit of the remission. The United States has had one conspicuous illustration of the workings of reciprocity of this sort, in the treaty of 1876 with the Hawaiian Islands. Under that treaty, sugar was admitted free from the islands; but they were far from being able to supply all the sugar consumed; other sugar was imported, paying duty; the

[1] The duties authorized under these conditions were: on coffee, three cents a pound; on tea, ten cents a pound; on hides, one and a half cents a pound; on the grades of raw sugar chiefly imported, a trifle over one cent per pound,—about one half the duty which was in force before 1890.

price remained as high as before, and the Hawaiian planters reaped the benefit of the remission. But the re-imposition of duties on articles coming from a particular country, if it leaves enough of other countries in the field, not paying duty, to supply the domestic consumption, brings a pressure to bear on the enemy without injuring the consumers at home. It is true that if one of the countries on whose goods duties were re-imposed, should supply a very large part of our consumption, the result would not be so innocuous. If, for example, the duty of three cents a pound were imposed on coffee from Brazil, all coffee would go up in price, not only that from Brazil, but that from other countries; and the producers from other countries would gain three cents a pound on their coffee, which the consumers in the United States would pay. But it was not probable that the power given by the reciprocity provisions would ever be exercised in a case of this sort. The simple threat of re-imposing duties would usually be relied on as a means of securing concessions from other countries, in the way of lower duties on goods sent them from the United States.

Concessions so obtained may or may not be advantageous to the countries making them; and they may or may not be of real importance and advantage to the United States. The countries from which concessions were asked were chiefly the South American countries. So far as agricultural commodities imported into them from the United States were concerned, a lowering of duties meant lower prices to the South American consumers, and

very probably an enlarged demand for such commodities sent from the United States. Grain, flour, provisions, are sent to these countries by the United States alone, and a remission of duties on them operates as a remission of the duty on English tin-plate would operate in the United States: it is practically a complete remission. Such changes bring about a real reduction of the burdens of taxation, and a real enlargement of the international division of labor.

But if the South American countries lower their duties on manufactured goods from the United States, the result may be different. Many of these goods are not made as cheaply in the United States as in European countries; as to others, the United States might not be able to supply the whole consumption of the country which gave it favors. Under such conditions, the lower duties would not mean lower prices to the South American consumer. The United States would then be in much the same relation to them, as the Hawaiian Islands were to the United States under the reciprocity treaty of 1876. Concessions of this sort, however, which do not redound to the ultimate advantage of the communities giving them, are not likely long to remain preferential. Sooner or later, they are likely to be granted to all comers. The experience of European countries under commercial treaties, especially under the net-work of treaties which spread over Europe after the conclusion of the treaty of 1860 between England and France, shows that a remission of duty in favor of one country soon is extended to others, and

becomes practically equivalent to a general lowering of the customs scale. This is likely to be the outcome of any concessions secured to the United States from South American countries under the reciprocity provisions; a result no doubt advantageous to all concerned, but less peculiarly advantageous to the United States than more limited concessions would be.[1]

As a whole, the tariff act of 1890 presented to the American people without disguise the question whether they wished a large extension of the protective system beyond the point to which it had developed by the legislation of the war period. The act of 1883, as we have seen, did indeed raise not a few of the protective duties; but other duties it lowered, and the advances were neither so great nor so conspicuously put forward as in the act of 1890. A retention of the existing state of things, such as

[1] In the course of 1892, treaties were concluded with the following countries: Great Britain, for Jamaica, Trinidad, Barbadoes, and British Guiana; Spain, for Cuba and Porto Rico; Salvador; the Dominican Republic; Nicaragua; Honduras; Guatemala; and Brazil. The remissions or reductions of duty secured by these treaties were chiefly on agricultural articles and others produced abundantly and cheaply in the United States. Duties had been imposed by proclamation, up to May, 1892, under the authority conferred by the reciprocity section, on sugar, tea, coffee, hides, coming from Venezuela, Colombia, and Hayti. The only country of considerable importance among these is Venezuela, which sends to this country about one tenth of the coffee imported.

With Germany, an arrangement was made by which the United States got the benefit of the slightly lower rates of duty conceded by Germany to Austria and Hungary by the treaties of 1892 with these countries. With France, a similar arrangement was made, by which American commodities were admitted at the minimum tariff of the French legislation of 1892. But these arrangements with European countries are in the main of only nominal importance.

on the whole the act of 1883 amounted to, might be urged on the ground that vested interests should not be disturbed, and that the inevitable disadvantages of any far-reaching change would outweigh any ultimate gain. The act of 1890 boldly proposed something more: a radical extension of the protective system. The question of principle never was so squarely presented.

CHAPTER VI.

THE TARIFF ACT OF 1894.

THE question of principle which was presented to the American people by the tariff act of 1890, was answered with remarkable promptness, and, to all appearances, in unmistakable terms. Immediately after the passage of the act, the party which had thus espoused the extreme protective policy suffered a crushing defeat; and, after two years of discussion and deliberation, the verdict at the polls was again overwhelmingly against it. The McKinley tariff had become law in October of 1890. In November, the Congressional elections were held, and the Republicans were defeated as they had never been defeated before. In the new Congress which was to succeed that which had passed the act of 1890, they secured only one quarter of the Representatives; their opponents outnumbered them three to one. Even States like Massachusetts, Ohio, Illinois, Michigan, long supposed to be stanchly Republican, returned Democratic majorities. The tariff question, which had been uppermost in public debate at this election, was again uppermost two years later, in the election of 1892. President Cleveland, who had made the tariff question the political issue of the day,

was once more nominated by the Democrats; and President Harrison was renominated by the Republicans. Again the result was a triumph for the Democrats, whose candidate received nearly twice as many electoral votes as his opponent. Again a row of Western States joined the ranks of the Democrats,—Indiana, Illinois, Wisconsin; while Ohio was retained on the Republican side by a slender majority of a bare thousand votes. The Congressional elections, while less dramatically one-sided than those of 1890, told substantially the same story. The Democrats had an overwhelming majority in the House; and in the Senate, as the elections in the various State legislatures were gradually held, they secured a working majority. The result was to assure them of full control of all branches of the federal legislature in the Fifty-third Congress, for the term of 1893–95.[1]

The Democrats, twice victorious, might fairly claim an emphatic declaration of the people in favor of their policy. How clear the popular verdict may really have been, is as

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[1] For convenience of reference, the strength of the two parties in Congress in 1889–95 is here summarily stated:

	House.		Senate.	
	Republicans.	Democrats.	Republicans.	Democrats.
51st Congress, 1889–91,	166	159	39	37
52d Congress, 1891–93,	88	236	47	39
53d Congress, 1893–95,	126	220	38	44

In addition to the 44 Democrats and 38 Republicans in the Senate of the 53d Congress, there were three Populists. These might be expected ordinarily to vote with the Democrats on tariff questions; but their support could not be implicitly relied on.

difficult to say as it must always be to interpret the meaning of a general election. The demoralization of the civil service, the scandals which that demoralization is sure to bring on every administration, the usual reaction of public favor, defections to the Populist Party—all these played their part. On the tariff itself, there was little in public discussion to indicate that the true questions at issue were fairly before the popular mind. A vague uneasiness about trusts and monopolies, which the protective duties were supposed to promote, clearly had much effect in strengthening the hands both of Democrats and of Populists; and the comparatively simple questions which at bottom are involved in the protective controversy were obscured by a cloud of talk about pauper wages and monopolist manufacturers, British free trade and American patriotism. Yet the tariff certainly had been squarely presented as the issue in these compaigns, and the Democrats were justified in acting on the theory that the popular will had declared itself against the policy of high protection.

But the enthusiasm which the victory at first aroused among the Democrats was dampened almost at once by the events of the extra session of the summer of 1893. The silver question had not been at issue between the parties in 1892. President Cleveland had repeatedly declared himself to be opposed to the policy of enlarging the silver currency. The Republicans also, even though they had tried to placate the silver element by passing the silver purchase act of 1890, had none the less declared

themselves in favor of keeping the silver issues at par with gold. But the silver question, pushed aside by the tariff question in 1890–92, came suddenly to the front in 1893, when the commercial crisis, ascribed (with sufficient reason) to the excessive issues of silver currency, compelled action on the financial situation. President Cleveland called an extra session, for the one purpose of repealing the silver purchase act and discontinuing silver coinage and silver issues. The strong element in his party which was in favor of the free coinage of silver fought this proposal, vigorously in the House, desperately in the Senate. The administration succeeded; its policy was carried out; the silver purchases were brought to an end. But the bitter struggle within the ranks of the Democrats did much to shatter their cohesion, and to deprive them of that spirit of determination in their own ranks, and that respect and prestige in the community, which are secured by a united and single-minded party.

Another factor that weakened the effect of the victories of 1890 and 1892 was the narrow Democratic majority in the Senate. The slowness with which, under our political system, the composition of the Senate responds to changes in the popular vote, is shown by the precarious hold which the dominant party had in that body. In the House, with a majority of nearly two to one, it could proceed without regard to discontent or dissent on the part of a fraction of its own members. But in the Senate the defection of a very few among the majority would destroy its control of legislation. As it happened, for one

reason or another there was danger of such defections. Some Democratic Senators were half-hearted on the general question of tariff reduction; others came from States which had strong interest in particular duties,—especially the Louisiana Senators. Old quarrels and bickerings, dating back to President Cleveland's first administration, and due chiefly to petty squabbles over appointments to office, caused still others to take a spiteful pleasure in blocking the movement for tariff reform which the President had so much at heart. The administration made some endeavor, both during the extra session of 1893 and during this regular session, to restore unity and discipline, and to bring all the Senators to the support of the party policy, by putting offices at the disposal of the sulky few. But this move availed little. It threw back for the time being the all-important cause of reform in the machinery of the government; and yet did little or nothing to remove the difficulties that arose from the narrow and uncertain majority in the Senate. Thus, for one cause and another, there was danger of defection in that body, and a need, based on more or less serious grounds, of conciliation and of careful management; a need which, as it turned out, had a great and unexpected effect on the final shape of the tariff act.

Such were the political conditions under which the regular session of 1893–94 began. At the extra session of 1893, no attempt had been made to deal with the tariff; but the committees had been arranged, and among them the Committee of Ways and Means, which had thus

been able to begin its preparations at an early date. Progress with the tariff bill was accordingly easy in the House. The committee reported its bill as early as December 19. That bill proposed some important remissions of duty, and in all directions made considerable reductions; not enough, indeed, to make it a revolutionary measure, yet enough to bring about, if enacted, a real and unmistakable change in the general tariff policy of the United States. Its specific provisions will be more conveniently discussed as we follow one by one the different phases of the proposed legislation, and the final outcome of the whole. The House acted with reasonable promptness: the bill was passed on February 1, substantially in the shape given it by the party leaders on the Ways and Means Committee.

Matters went more slowly in the Senate. There the finance committee did not report the bill until March 20, and then with many and important amendments. The changes were all in the same direction,—toward moderating the reductions, and taking the edge off the measure as passed by the House. When the bill came from the committee to the Senate, still further amendments of the same sort were added. Hence when, after long delays, it was finally passed by the Senate, on July 3, it was a very different measure, in spirit and in details, from that which had been passed by the House.

The House and Senate disagreeing, the bill went to a conference committee. Almost without exception, during the last thirty-five years, the details of tariff bills have

been finally adjusted in such committees; and it was to be expected that in this case, as in others, the act as passed would be half-way between the House bill and the Senate bill. This expectation was disappointed. In the Senate the bill there had been passed by a vote of thirty-nine to thirty-four, and among the thirty-nine were two or three Populist Senators who owed no allegiance to the Democratic Party. The votes of all the Democratic Senators were felt to be necessary for its final passage. Several among them insisted on amendments admitted to be distasteful to the mass of their party associates; and the close balance of parties in the Senate enabled them to command the situation. President Cleveland's letter to Mr. Wilson, the chairman of the House Committee of Ways and Means, urging resistance to the Senate amendments, had no effect beyond that of making clear to the country what were his own views. Whether better management in the Senate would have secured a result more in consonance with the party pledges and principles is not easy to say: beyond question, the leadership of the Democrats in the upper branch was lamentably unskilful. In the end, the House accepted all the amendments of the upper body, and the bill as shaped in the Senate became the act of 1894. President Cleveland signified his justifiable discontent with its provisions by permitting it to become law without his signature. It finally went into effect on August 28.

So much as to the immediate history of the act. We may proceed now to consider its main provisions.

First and foremost was the removal of the duty on wool, and with it an entire change in the duties on woollen goods. Wool and woollens had been for years the central part in the protective system. The change here was an important—almost revolutionary one; and it may be remarked at once that in the whole act no other articles of large importance were thus incisively dealt with.

Free wool was important in its political and in its economic aspects. The duty on wool had been the most significant feature in the policy of all-inclusive protection which the Republicans had emphasized in the McKinley act of 1890. It had been almost the only article through which protection could be promised and given to agricultural voters. There were duties, to be sure, on wheat, corn, and meats—articles which were continuously exported and obviously could not be affected by an import duty. But wool was imported, and was really affected by the duty; and it could be fairly maintained that here the farmers got some share of the benefits of the protective system. Moreover, some of the central States of the country, like Ohio, where there was much wool-growing, were closely divided in politics. Here the wool duty played a prominent part; and it required some courage among the Democrats to present themselves squarely on the platform of free wool.

In its economic aspects the removal of the duty on wool was important as a crucial application of the principle of free raw materials. In that advocacy of protection which has gained the most respectable hearing from

serious students of economics,—the advocacy, namely, of what goes by the names of developing protection, educational protection, protection to young industries,—it has usually been explained that crude materials are beyond the scope of the protective policy. Even in the political arguments which we often hear from German writers of the present time, and in which national dependence and self-sufficiency play a large part, the line has usually been drawn against the inclusion of articles of this sort in the protective régime. The desire to encourage the manufacture of woollens has probably been quite as effective as these more theoretical considerations in preventing the extension of the protective policy to wool, even in the countries which in late years have gone so far in the direction of protection. At all events, no country of advanced civilization has maintained any duty on this material, and the retention of such a duty in the United States was perhaps the most characteristic feature of our protective system. President Cleveland had specifically advocated the free admission of wool in his message of 1887; the Democrats had put it on the free list in the Mills Bill, in which they outlined their policy in 1888; the Republicans had emphasized their adherence to the opposite policy by increasing the duty on wool in the McKinley act. Now, at last, it went on the free list.

Equally great, at least in form, was the change in the duties on woollen goods. Here the curious system of compound duties was completely swept away. Its history and development, from the first germs in 1861 to the

elaborate rates in the tariff act of 1890, have been sufficiently detailed in the preceding chapters. No part of the tariff was more intricate; in none was it more difficult to ascertain the real degree of net protection finally given the manufacturers; in none were the duties higher. In place of these old complex rates a simple system of *ad-valorem* duties was established. In the bill as passed by the House the rate (on the important classes of woollen goods) was made forty per cent. in the first year, with a reduction of one per cent. each year for five years, until eventually a definitive rate of thirty-five per cent. should be reached. But among the many changes made by the Senate was the adoption of a much more conservative policy as to woollens, and a considerable advance beyond the House rates. The rate was fixed at fifty per cent., once for all, on the more important classes of goods. Certain cheaper sorts of blankets and flannels, it is true, were subject to no more than twenty-five per cent.; and the cheapest kinds of materials for men's and women's wear were to pay but forty per cent. But, as in former tariff acts, these lower rates were applicable only to goods which had not been imported in the past, and would not be imported under the new rates. On all men's clothes and women's dress-goods which were valued at more than 50 cents a pound,—that is, on practically the whole mass of such articles really subject to foreign competition,—and on all manufactures of wool not specially provided for, the *ad-valorem* duty was that of the McKinley act,—fifty per cent. Similarly, on the important classes of

carpets, while the old specific or compensating duty disappeared, the *ad-valorem* duty was left at forty per cent. In general, the higher *ad-valorem* rates established by the tariff act of 1890 remained untouched: the change on woollen goods was limited to a simplification of the system of duties by the abolition of those specific rates which had previously been levied as an offset to the duties on the raw material.

Theoretically, therefore, the manufacturers of woollen goods lost nothing by the change. They were treated, in the act as finally passed, with marked tenderness: a tenderness further emphasized by the fact that, while wool was admitted free at once, the new duties on woollens did not go into effect until January 1, 1895. For a season they thus got their material free, yet had the benefit of the old duties on their goods. Practically, however, even with this aid toward adjusting themselves to the new conditions, the manufacturers had to face a trying period of transition. We have seen, in the preceding chapters, that the specific duties on woollens, though nominally a simple offset for the increased price of wool due to the duty on that material, contained in many cases a large amount of disguised protection. This was lost under the new system. Even where the case was different, and where the specific duties had done no more than to compensate, the gain from the abolition of the duties on wool did not inure to the manufacturers by any automatic process. They had to learn to take advantage of the lower price at which they could buy the imported

wool, now free; and only by taking full advantage of it could they be in a position to meet the competition of the foreign makers, whose products were coming in at the simple *ad-valorem* duty on woollens. To do this, the domestic manufacturers, long confined to the use of domestic wool and of a very small range of foreign wool, had to learn to adjust or improve their machinery, to use new qualities of wool, and to make new kinds of cloths. The advocates of the remission of the duty on the raw materials had always maintained that the change would vivify the woollen manufacture, widen its range, and increase its prosperity. On the other hand, among the manufacturers and their representatives, there had been a natural aversion to the abandonment of a system, however complicated and confused, to which the industry had been compelled to accommodate itself by a quarter-century of legislation. What the final outcome would be, could appear only after a considerable trial of the new system, continued over some years at least. But the general public had not been trained by either side in the controversy to await the results with any patience. The protectionists had predicted immediate disaster; their opponents immediate prosperity. This mode of dealing with controverted questions is perhaps inevitable in popular discussion: certainly the *post hoc, propter hoc* argument has been applied to the protective controversy, both in its larger aspects and in its relation to particular industries, with astonishing readiness. No critical observer could expect the change in the duties on wool and wool-

lens to show its real effects in one season, or in several seasons, or to work out its results without more or less uneasiness and embarrassment for the domestic producers. That its ultimate result—considering how tenderly the manufacturers were dealt with in the act of 1894—would be harmful to the woollen industry as a whole, seems highly improbable. So far as the general question of protection was concerned, the wool and woollen schedule in the act of 1894, while it made a sharp break with the past, in putting on the free list at least one important raw material, evidently left the principle of protection, as applied to manufacturers, absolutely untouched, and affected the operations of the woollen manufacturers no more than was inevitable in view of the radical policy followed with regard to wool.[1]

On other textile materials and products the changes in duties were by comparison unimportant. On most manufactures of cotton there was some change, but in few cases an effective change. On a few of the cheaper grades there was on the surface a considerable reduction. Thus the cheapest class of unbleached and unprinted cotton goods became subject to a duty of one cent per yard, in place of the old duty of two and one-half cents. But these

[1] For some consideration in detail of the effects of the old system on wool and woollens, and the probable effects of the new, see an article by the present writer in *Quarterly Journal of Economics* for October, 1893; a criticism of this article by Mr. S. N. D. North in the *Bulletin of the Wool Manufacturers*, for December, 1893; and a pamphlet by Mr. E. D. Page, on *The Woollen Tariff* (New York, 1893), containing papers reprinted from the *American Cotton and Wool Reporter*. Compare also what is said of the act of 1897, *infra*, pp. 328–335.

goods are made as cheaply in the United States as in foreign countries, if not more cheaply; they would not be imported in any event; and the change in duties was merely nominal. On finer cotton goods, more than likely to be imported, the changes in rates were not great. Where the duty had been fifty per cent. in 1890, it became forty per cent. in 1894; where it had been forty per cent., it became thirty-five per cent. On knit goods there was a more considerable reduction, at least as compared with the rates of 1890. These goods, as we have seen, had been subject in 1890 to a complicated series of mixed specific and *ad-valorem* duties. They were now subject to a simple duty of fifty per cent. This, while a reduction from the rates established in 1890, was higher than the duty in force before that date. Here, as in not a few other cases, the reform movement of 1894, as checked and pruned in the Senate, did not even succeed in wiping out all the effects of the extreme protective movement that preceded it.

Silk manufactures, on which the protective duties of the last generation had very important effects, were hardly touched. The duties on some silks went down from sixty to fifty per cent. on others from fifty to forty-five per cent. The changes were hardly worth mentioning. Much the same was the case with linens. Raw flax was admitted at 1½ cents per pound, just half the duty of 1890. Manufactures of flax were admitted at reductions of duty very similar to those just noted as to silks. Since virtually no linens of finer quality were (or

are) produced in this country, and those of coarser quality were as effectually shielded by the new duty as by the old, matters remained very much as they had been. One change was an exception. Bagging of jute, flax, or hemp, for grain or cotton, was admitted free of duty—a direct concession to the farmers and planters.

Next we may turn to the duties on minerals and mineral products. Here the articles to which public attention was chiefly given were coal and iron ore. These are by no means the most important articles in the tariff schedule relating to minerals and metallic products; but they are emphatically raw materials, the question of principle in dealing with such was hotly raised as to them. The two houses of Congress here disagreed sharply: the House put both articles on the free list, while the Senate insisted on the retention of duties, even though reduced duties. The dispute drew to this part of the tariff system a share of public attention disproportionate to the real industrial significance of the duties, and brought into full relief the failure of the act as finally passed to carry out with steady consistency the Democratic Party policy.

Free coal would be of some consequence on the north Atlantic coast and on the Pacific coast. Both districts happen to be far from the domestic sources of supply, and comparatively near to mines across the border. The Pacific coast got coal from British Columbia and from Australia, and felt the duty on coal as an undesirable burden. But with few manufactures, and a mild climate, the burden was not a serious one. In New England, essen-

tially a manufacturing community, the case might be different. Some Canadian mines are geographically a bit nearer than the mines of West Virginia and Virginia which feel their competition. It was a question, to be sure, how serious that competition would be, how good the quality of the Canadian coal would prove, how effectively the transportation of this coal could be organized. But it was difficult to give any good reason for not allowing New England every opportunity for cheapening its supply of coal. The opposition to the repeal of the duty was a clear and simple case of an attempt of certain producers to make a levy on consumers. Coal had been made free by the House; the act left it subject to a duty of forty cents per ton. The old rate had been seventy-five cents. The amendment made by the Senate was felt in all quarters to mean a conspicuous failure to carry out consistently the program of the Democratic Party.

The result was similar with the duty on iron ore. The essential facts as to the working of this duty have already been stated.[1] Here too the question of duty or no duty was immaterial so far as the great bulk of domestic production and consumption was concerned. The question was simply whether certain iron and steel establishments near the seaboard should get their iron ore free, or should be induced by a duty to buy domestic ore produced at a distance. Directly, the issue was between the great corporations which mined the ore in the West, and the other great corporations which had iron and steel plants on or

[1] See above, p. 271

near the Atlantic seaboard. It might be argued, indeed, that this was the only issue. In view of the long series of producers and middlemen whose operations must intervene before the finished product of industry can reach the consumer, still more in view of the hindrances to unfettered competition among the middlemen, it might be plausibly maintained that not only the immediate question, but the ultimate question, was between two sets of producers, not between the producers and the public. But here, as on many other questions, it is safe to proceed on the general ground that the wider the sources of supply and the cheaper the raw materials of production, the greater the chances that the benefits will filter through the layers of middlemen, and that the public as consumers will eventually gain. Hence, so far as any question of principle was concerned, everything was in favor of free ore. Arguments as to the development of struggling industries or the fostering of national independence could not be to the point; since the great bulk of our iron ore, and the great bulk of our iron and steel, were sure to be produced within the country under any circumstances. The fate of the iron-ore duty was the same as that of the coal duty. The House repealed it; the Senate restored the duty, but at forty cents instead of seventy-five cents per ton. Again the principle of free raw materials was set aside.

The duty on pig iron was brought down in the act from $6.72 to $4 a ton. In the House of Representatives the duty had been made twenty per cent., which would have meant a much more considerable reduction on most quali-

ties of iron. Twenty years earlier, even ten years earlier, such a change as was proposed by the House would have been of great importance: even that enacted would have been of moment. As matters stand in the closing years of the century, the reduction did not signify much. The production of crude iron advanced at an enormous rate after 1880. With the discovery of new sources of supply, with improvements in production and transportation, the great bulk of the iron would be produced at home, even if there were no duties at all. Some parts of the Atlantic and Pacific seaboards, which are distant from the domestic centres of production, would import iron, if free of duty, rather than buy it at home. But in the main, the days in which the duty on pig iron could exercise very wide reaching effects, were gone by. The change made in 1894 encountered little opposition, because it could be no longer of great effect.

The duty on steel rails, that old bone of contention, was lowered from $13.44 to $7.84 a ton. From 1883 to 1894, each tariff act had taken a slice from this duty: each time in such manner that no direct effect was felt on prices, the decline in the duty following and not preceding the decline in prices. The steady fall in the prices of iron and steel products during the past generation has been due to a variety of causes. Partly they have been of world-wide operation, bringing about a tendency to lower iron prices in all countries; partly they have been of special effect in this country, in the discovery of new sources of supply, and their utilization through great improve-

ments in transportation. No small factor has been the remarkable application of American enterprise, invention, and engineering skill to the production on a vast scale of Bessemer ore, Bessemer iron, and Bessemer steel. Through it all, the prices of steel and of steel rails have been steadily higher than they would have been without a duty; and the tariff system has contributed to the maintenance of monopoly profits. The lowering of the duty on steel rails in 1894, like the earlier reductions, had no immediate results, the duty being still left at the prohibitory point. But, as in the case of previous reduction, the lower rate set a limit to possible future advance in prices. Nothing could have been lost, and something would probably have been gained, by a more incisive change.

On one other much disputed article a change was made, of greater practical importance than in the case of steel rails, but again of less extent than might have been expected. The duty on tin-plate was reduced to exactly one-half that which had been levied in the act of 1890: it had been $2\frac{2}{5}$ cents per pound, and it was made $1\frac{1}{5}$ cents. The reduced duty is still higher than that in force before 1890; so that here again the legislation of that year was allowed to leave its mark on the statute-book.

In most of these cases specific duties were retained by the Senate, in place of the *ad-valorem* duties which had been adopted by the House.[1] In some cases, it is true,

[1] In the case of tin plates, the House had already adopted the specific duty; doubtless on the ground that the tin-plate establishments built up under the act of 1890 deserved consideration as having vested interests.

the Senate simply raised the *ad-valorem* rates which the House proposed; and here the outcome was usually a substantial reduction from the old specific rates. Thus the duties on chains, guns, and some sorts of cutlery remained in *ad-valorem* form, and were considerably lowered. The general retention of specific duties by the Senate was among the changes which most disappointed the advocates of lower duties; and this for the simple reason that it was made the occasion for higher rates than had been proposed in the other form. So far as the direct question of administrative advantage goes, everything speaks in favor of specific duties; and our tariff reformers have usually been curiously blind to the difficulties inevitable in the collection of *ad-valorem* duties. But these latter have the unquestionable advantage of telling their own tale. What the meaning and effect of a specific duty is, can often be known only to a few persons familiar with the details of some minute branch of trade. In fixing them, the legislator necessarily seeks the advice of experts, who are likely enough to have wishes and interests opposed to those of the public. Wittingly and unwittingly, these duties have often been arranged in a manner to promote the interests of particular enterprises, and so to justify the charge that they tax the many for the benefit of the few. Hence the natural repugnance of those who are opposed to the principle of protection; hence their disappointment when the comparatively simple scheme of *ad-valorem* duties adopted in the House was transformed by the Senate into a system of specific

duties intricate, bewildering, and not unfairly open to suspicion.

Among other manufactured articles, earthen-ware and china-ware were dealt with least tenderly. Here it is somewhat surprising to find a real and effective change in the duty. Finer qualities of china-ware went down from sixty to thirty-five per cent., the cheaper qualities from fifty to thirty per cent. The finer qualities had always been imported in very considerable quantities; it was very possible that under the reduced duty large quantities of the cheaper grades might also be imported.[1] On what principle these articles should have been selected for special reduction, it is difficult to say; but certainly there was here a substantial change. Glassware of all sorts remained very much as it was.

Questions in many ways different from those which arose with regard to manufactures and raw materials, were presented by the duty on sugar. That article came into sudden and surprising prominence in the debates of 1894. It is true that it had played an important part in 1890, when the remission of duty on raw sugar had been an essential part of the general policy of the McKinley tariff act. But attention had then been given mainly to the burden which the tax on raw sugar imposed on consumers, and to the benefits which its remission would bring to them. In 1894, however, the tax on refined sugar, and its effect on the sugar-refining industry,

[1] See what is said of earthen-ware and china-ware in the concluding chapter of this volume.

received the greater share of attention. This change in the point of view was due to the fact that between the two dates the monopoly conditions in the refining of sugar had become a matter of common knowledge. Hence the question of protection as fostering monopoly was brought home to the public, uneasy at best at the development apparently on all sides of combinations and trusts.

The sugar duty, in its various forms, involved a great variety of economic and social questions. That on raw sugar involved both fiscal questions and questions as to the social effects of taxation. That on refined sugar presented at once a phase of the protective controversy and a phase of the new and portentous problem of monopoly combinations. It will be advantageous to consider separtely the very different questions presented by the two parts of the sugar tax.

The reasons for and against a duty on raw sugar may be summarized as follows. In favor of the duty it is to be said that it would yield at once a large, certain, steady revenue. Some increase in the revenue was agreed on all hands to be necessary. No one change in the McKinley act had done so much to upset the federal budget as the removal of the duty on sugar, and no one change was so certain to bring an additional revenue as the re-imposition of this tax. In view of the position of the federal Treasury as the holder of the metallic reserve for virtually all the paper money outstanding, it was of prime importance to put it in a secure financial position.

Next, while the sugar tax is a tax, it is in the main (setting aside the comparatively small domestic production of sugar) a simple tax, bringing none of the diversion of domestic industry and none of the ulterior consequences which flow from protective duties. It is commonly asserted by Protectionists that a remission of revenue duties, like those on tea, coffee, and sugar, is in a peculiar sense a remission of taxation; the implication being that protective duties on commodities made at home are not really taxes, but in some roundabout way are pure gain. It would be the part of courage and honesty for those opposed to protection to act on the ground that, while both alike are taxes, the revenue duties are the less burdensome and the less harmful of the two. They should, therefore, where opportunity arises, maintain revenue duties boldly and remit protective duties freely. As between duties on raw wool, coal, and iron ore on the one hand, and a duty on sugar on the other, the party opposed to the principle of protection should unhesitatingly choose the latter.

Thirdly, the Louisiana sugar producers were fairly entitled to some consideration. Unlike wool-growing, their industry involved a considerable plant; and it offered no easy opportunity for a change to something else. An immediate abolition of the duty, or of the equivalent bounty, which had been granted in 1890, would unquestionably work hardship to them. In view of the tenderness with which most of the protected industries were treated, they might reasonably complain of any sudden and uncondi-

tional withdrawal of the aid which they had had for generations.

The strong argument against the duty on raw sugar is that which bears against almost all indirect taxes productive of a large revenue. To be productive, such taxes must be imposed on articles of wide consumption; and articles of wide consumption are always of the sort consumed proportionately more by the poor than by the rich. The tax is socially unjust. The full weight of this objection can be fairly judged, to be sure, only on a consideration of the incidence of an entire system of taxation,—in the present case, not only of the federal taxes, but of the State and local taxes as well. It might conceivably be maintained that the State and local taxes, which are chiefly direct, serve to offset the injustice of an indirect tax like the sugar duty. They are levied in the first instance chiefly on the well-to-do; and though their ultimate incidence is in the highest degree complex, it is at least doubtful whether they bear with proportional weight on those classes in the population which would be most affected by a duty on sugar. It is probable, too, that other parts of the tariff schedule, notably the duties on textiles, bear most heavily on commodities consumed by the richer classes. But a comprehensive inquiry of this sort would almost certainly fail of a satisfactory conclusion; and it is inevitable that Congress should have an eye solely to the federal taxes which are under its control. Here there is the clear social injustice of a sugar duty, considered *per se*. Add to this its visible and unmistak-

able payment by consumers, and the pressure against it in a democratic community becomes formidable.

The conflict between sober counsels in favor of the productive revenue duty, and popular suspicion of its effects in aggravating inequalities in taxation and so in the distribution of wealth, was emphasized by the income tax proposal. Obviously the income tax, which was made a part of the tariff act of 1894, was precisely what the sugar duty was not. The revenue from it was uncertain in amount, and in any case would come in but slowly, affording no prompt relief to the Treasury. Moreover, levied as it was only on incomes exceeding $4000 a year, it was a tax on the rich alone, and, thus precisely the opposite in social effect from the sugar tax. The income tax was popular in the South and West, where it was most strongly felt that the burden of taxation did not bear sufficiently on the rich, and where the strength of the Treasury was a matter of indifference, not to say hostility; while the sugar tax (barring the exceptional case of Louisiana) was strongly opposed in those regions.

Curiously enough, the outcome of the action of Congress was that both of these taxes were put into operation. In the bill as passed by the House, sugar had been made free, and the bounty abolished. But in the Senate the two Louisiana Senators were among those whose votes were needed if the tariff bill was to pass that branch, and they insisted on some concession to their constituency. The Administration, anxious for a substantial balance in the right direction at the Treasury,

also brought its influence to bear in favor of the sugar duty. Consequently it was inserted by the Senate; while the income tax, which in the House had been in a manner a substitute for it, was also retained in the Senate. Later, the decision of the Supreme Court as to the unconstitutionality of the income tax as levied by the act, wiped out that part of the measure, and left the duty on raw sugar without an offset, to the bitter disappointment of those who had opposed both this tax in itself and the tax on refined sugar which it brought in its train.

As it became law, the act imposed a duty on raw sugar of forty per cent. *ad valorem.* The bounty of 1890 was abolished. The new duty was equivalent roughly to one cent a pound, or about one-half the duty in force before 1890, and one-half the bounty granted in that year. Its *ad-valorem* form was peculiar. Never before, except under the general policy of *ad-valorem* rates in the acts of 1846 and 1857, had sugar been subjected to any other than a specific duty. The form now adopted served to cut a Gordian knot: it was a short cut out of the difficulties which were met in the endeavor to arrange varying rates on different grades of raw sugar in such manner as to satisfy both the Treasury officials, the sugar producers, and the refiners. It connects itself with the discussion of the extra rate on refined sugar: to which we may now turn.

The salient facts as to the sugar refiners and their relations to the tariff system were simple and familiar. Sugar refining had been, almost as a matter of course, within

the protective pale, and had been aided by a duty on refined higher than that on raw sugar. The policy of discriminating in this way in favor of the domestic refiners would probably not have been questioned, except in the matter of degree, had it not been for the development of monopoly conditions in the industry by the formation of the Sugar Trust, which later grew to be the American Sugar Refining Company, still popularly known as the Trust. This put a new phase on the matter in the public eye, the more so as the sugar combination had been the first of the original trusts, and had been more prominently before the community than any other. The more ardent free-traders have always contended that protective duties are the chief cause of combinations and monopolies, or trusts. It needs no great acquaintance with economic history, and no great skill in general reasoning, to show that the tendency to combination has deeper causes than protective legislation, and presents problems more complicated, and in their social importance more weighty, than those involved in the tariff controversy. But it is undoubtedly true that in some cases the drift toward monopoly conditions has been promoted by favoring duties. Sugar refining happened to be a case of monopoly familiar to all the world; the monopoly in this case had in fact been both easier to bring about and a source of greater profit, because of the protective duty; while the nature of the article made a tax in favor of the monopoly producer particularly odious.

With all sugar free, whether raw or refined, the Ameri-

can refiner would be at some slight disadvantage, since freights would amount to a trifle more on raw sugar than on the less bulky refined sugar which might have been imported from foreign quarters. But this disadvantage would be insignificant. Hence when the House passed the tariff bill with both raw and refined sugar free of duty, it practically left the refining monopoly to stand on its own legs, neither helped nor substantially hindered by the tariff. When, however, a duty on sugar was resolved on in the Senate, the difficult question at once was raised how to adjust the rate on refined sugar to that on the crude form. A level duty, at the same rate on raw and on refined, would put the refiners to some real disadvantage. From 100 pounds of raw sugar something less (95 to 98) of refined sugar is obtained, and a level duty would operate distinctly to the advantage of the foreign refiner. Hence, if a revenue duty were imposed on raw sugar, and if it were desired to treat the refiners with absolute indifference, a slight additional duty should be put on refined. Exactly how great this additional duty should fairly be, it was not easy to calculate. The data for the calculation must come chiefly from the refiners; and any figures furnished by them must be received with caution. But a very small difference would suffice to prevent refiners from having any ground for complaint. If a duty of one cent a pound were put upon raw sugar, an additional duty of one-twentieth of a cent would be ample to offset the loss in weight on refined sugar made from the dutiable raw sugar.

Naturally, the sugar refiners wanted something more than bare equality. They wanted a continuance of the favors which the legislature had granted them for generations in the past. In 1890, when raw sugar had been admitted free, refined sugar had been subjected to a duty of one-half a cent per pound. It is probable that the processes of refining are carried on at least as cheaply in the United States as in any foreign country, and that even without any protection at all the sugar-refining industry could maintain itself, and the sugar monopoly make handsome profits. With a barrier against foreign competitors such as the tariff of 1890 gave, the profits were enormous. It was inevitable that great efforts should be made to preserve them.

Briefly, the changes which the sugar schedule underwent during the session were as follows. In the tariff bill as first reported to the House by the Committee of Ways and Means, raw sugar was left free, and a duty of one-quarter of a cent per pound was put on refined sugar. In other words, the largess given to the monopoly by the act of 1890 was to be reduced one-half. In the House, however, the feeling was in favor of a more radical change. The provision for a duty on refined sugar was struck out; and all sugar, raw and refined, was put on the free list, so depriving the trust of all legislative favors. In the Senate, the finance committee amended the sugar schedule by imposing specific duties on raw sugar, roughly at the rate of one cent per pound, with an additional duty of one-eighth of one cent per pound on refined sugar. The duty

on raw sugar was inserted partly to gain revenue, partly to secure the votes of the Louisiana Senators for the bill. But when final action came to be taken in the Senate, still another change was made. The duty on raw sugar was changed from specifice to *ad valorem*, and was made forty per cent. Over and above this, the duty of one-eighth of one cent on refined sugar was retained. Still further, a provision which had been introduced into the tariff act of 1890 was also retained, by which an extra duty of one-tenth of a cent per pound was imposed on refined sugar coming from countries that gave an export bounty. In this form the sugar schedule was passed by the Senate, had finally to be accepted by the House, and so became law. The final outcome was more than satisfactory to the Sugar Trust. There was the duty of one-eighth of a cent on refined sugar; and there was an extra one-tenth of a cent on refined sugar coming from those continental countries, especially Germany, which give an export bounty, and whose competition was alone to be seriously dreaded. The *ad-valorem* form of the duty was also advantageous, bearing as it did less heavily on lower grades of sugar than on higher.[1] On the whole, the re-

[1] *Ad-valorem* duties are assessed on the value of the imported commodities at the time and place of purchase. Raw sugar comes largely from distant countries, or from countries with which transportation is not highly organized, as from Cuba, Java, Brazil, and the Hawaiian Islands. The value at the place of purchase is comparatively low, and freight is comparatively high. On the other hand, refined sugar would be imported, if at all, only from the more advanced European countries. Freight charges from these are low, and the value at the time and place of purchase does not differ very greatly from the value at the American ports. Virtually, therefore, the *ad-*

fining monopoly, while it lost something, came out of the struggle victorious, and was left in little less secure control over the trade under the act of 1894 than under the act of 1890.

Much was said during the session and after the session of influences brought to bear by the trust on certain Senators. An investigation held during the course of the session brought out some facts freely suspected before, and not creditable to our political life. It was admitted that the trust had made contributions to the chests of both political parties, although nominally to the State organizations only. No bargains are ever made in these too familiar cases, but it is expected and understood that what is called "fair consideration" will be given to the interests of the obliging donor. It was proved also that some Senators had speculated in sugar stock. No protest as to the absence of connection between such dealings and the legislator's vote can save them from the taint of dishonor. It would appear also that the success of the trust was promoted by the position of the Louisiana Senators, who were anxious to secure a duty on raw sugar, and who seem to have entered into some sort of bargain for supporting the higher duty on refined sugar in exchange for aid to their own efforts.

In any case it is clear that the sort of manipulation by which the refiners succeeded in retaining their favors from

valorem duty is less heavy on raw sugar than on the refined, and so yields to the refining monopoly an advantage, not easy to calculate, yet probably substantial. It is certain that this form of duty was advocated by the representatives of the trust—in itself a reasonable ground for suspicion.

the tariff was possible only because of the narrow majority which the Democrats had in the Senate. Where one or two votes would have sufficed to block the whole measure, the opportunity for dishonest or selfish pressure on legislation was easy. It is possible to bribe or convince or entangle a few legislators, and so bring them to throw to the winds party consistency and public justice; but fortunately our conditions are not so corrupt as to make it possible to bribe a whole party or overturn a strong majority. In the House, where the Democratic majority was greater, the manipulation of sugar duties was impossible. It was in the Senate, where a change of one or two votes meant failure to the whole measure, that the unsavory result was achieved.

No part of the tariff legislation of 1894 was more disappointing to those who were earnest in their advocacy of tariff reform than the outcome of the sugar imbroglio. None, too, did more to damage the prestige of the Democrats. They had posed as the champions of the public against the monopoly; yet the trust had conquered. It is true that the extra duty on refined sugar—the part of the schedule which alone was of real advantage to the trust—was less than it had been in 1890, and that the public in reality was better off than it had been before. But the intricacies of the case were too complicated to be readily understood by the average voter. The imposition of any duty at all on sugar was probably thought to be a surrender to the trust. The revenue tax on raw sugar, fairly open to objection on grounds of social injustice, was sup-

posed in many quarters to be much more objectionable, —to be levied *in toto* for the benefit of the monopolists. The effect of a simple sweeping away of all duties on sugar, whether raw or refined, would have been transparent to the popular mind; but the impression left by the long and unsuccessful struggle, and the complicated outcome, was mainly that the promises of the Democrats had not been kept.

No doubt the strong feeling which the surrender to the sugar monopoly aroused rested largely on a blind opposition to combinations in general, and to the corporations which are supposed, rightly or wrongly, to have a monopoly position. Whether the tendency to combination is to be welcomed or regretted, has not often been soberly considered by the American public. The usual assumption is that it is an unquestionable evil, to be fought in every way by legislation. That disposition which shows itself, both among the welcomers of socialism and among many critical economists, to accept combinations and consolidations and to use them as instruments of social reform, finds hardly an echo in the United States. Doubtless the popular instinct here is right. The drift to consolidation and monopoly presents problems with which a democratic community can deal only under great disadvantages. To regulate it, to use it, to secure from it the possible benefits, requires a degree of nicety and consistency in legislation which our American communities could reach only by slow and arduous steps. Legislation to check consolidation may be unwise, and probably is futile; but legis-

lation directed to encourage it, still more legislation to augment the profits of a monopoly, is surely of the worst.

The revulsion against the extreme protective system which showed itself in the elections of 1890 and 1892 was probably in a large degree a consequence of the popular feeling just described. While the essential question as to protective duties is comparatively simple, the intricate reasoning which is needed to follow the effects of such duties into all the ramifications of international and domestic trade can have but little influence on the average citizen. He reasons from few premises, and is affected by simple catch-words. The outcry against trusts and monopolies, though in fact it describes an exception rather than the normal working of protective duties, was probably the most effective argument in bringing about the public verdict against the McKinley act. It is expressive of the general feeling of unrest as to the power of great corporations, the growth of plutocracy, the gulf between the few very rich and the masses of comparatively poor, which is becoming a stronger and stronger political force, and is destined in the future to have larger and larger effect on legislation.

It is clear that the new tariff act made no deep-reaching change in the character of our tariff legislation. The one exception was the removal of the duty on wool. Barring this, there was simply a moderation of the protective duties. A slice was taken off here, a shaving there; but the essentially protective character remained.

This would have been the case even had the Wilson Bill, as originally proposed to the House or as passed by that body, become law. That less anxiously conservative measure was of course alleged by its opponents to portend ruin to American manufacturers and prostration to American labor. In fact, while it might have affected some industries, it would have caused no considerable disturbance of industry and no considerable rearrangement of the productive forces of the nation. The act as finally passed was even less potent for good or for evil. In not a few cases, the duties, while lower than those enacted in the McKinley act of 1890, were still higher than under the tariff act of 1883. As far as it went, it began a policy of lower duties; but most of the steps in this direction were feeble and faltering.

Whether such a measure be good or bad, must be decided in the main on general principles. To follow out its influence on the prosperity of the community requires time for the observation of effects, and great skill and caution in the interpretation of industrial phenomena. Even had the new legislation been much more drastic, its final effects on general welfare could have shown themselves only after the lapse of a considerable period, and then might easily have been concealed or obscured by the operation of other causes. To judge a very moderate measure like that of 1894 by its visible fruits is so difficult as to touch the bounds of the impossible. The effects on any particular industry,—which are but a fragmentary bit of evidence as to the promotion of general prosperity,—

are sufficiently difficult to trace. We have seen how the one radical change made by the act, in abolishing the duty on wool, required time to show how it might affect the wool and woollen industry. Even after the lapse of time, there could hardly be such an unmistakable result one way or the other as to prevent doubt and dispute. When all the evidence on this point was in, it could still be of little avail toward answering the fundamental question,—whether the productive forces of the community were applied to better effect with a low tariff than without it.

But the general public has been taught to expect immediate, almost magical effects. Both parties in the protective controversy have preached the same gospel, and made the same promises. For high duties and for low duties alike it has been claimed that they would convert depression into prosperity. This has been the case, in more or less degree, throughout our tariff history; and the inevitable disappointment with the expectations so raised has had its effect in bringing about the vacillations in public feeling and the frequent changes in policy. The act of 1894 was defended and attacked on the same superficial grounds; and it happened to suffer from the contingencies of the moment. It went into effect shortly after an acute commercial crisis, and in the worst stage of a period of severe depression. The crisis and the depression, were due, in this case as in all others, to a long and complex set of causes, some of them still obscure even to the best informed and most skilled observers.

That the tariff act played any serious part in bringing them about, would not be maintained by any cool and competent critic. But the great mass of the public judged otherwise. The act had been followed by hard times; at best, it had done nothing to remedy them. Half-hearted in its provisions, unlucky in the time of its enactment, it could make no warm friends, and earn no general approval.

Thus, whether in its effects on legislation or on public opinion, the movement for tariff reform from 1887 to 1894 was in its outcome disappointing. The decisive victories in the elections of 1890 and 1892 had led the free-traders to form high hopes: the real beginning of the long deferred reform seemed at last at hand. But the victorious party was soon split by internal dissensions. With the acute crisis of 1893 and the growing accentuation of differing opinions on the currency, that issue forced itself forward. The session of 1893–94, as it progressed, witnessed slackened enthusiasm, inept leadership, and an inglorious result. President Cleveland's action in permitting the new tariff act to become law without his signature, put the final stamp of indifference and disappointment on the measure.

CHAPTER VII.

THE TARIFF ACT OF 1897.

At the time of the passage of the tariff act of 1894 nothing seemed more improbable than an early return to the policy of high and all-embracing protection. That policy, as embodied in the act of 1890, had met with apparently unquestionable rebukes at the polls in 1890 and 1892. Nor was there anything in the legislation of 1894 to invite a reaction. As we have seen, the act of that year, so far from being radical, had been, with the single exception of the free admission of wool, anxiously conservative. Once it was passed, the community heaved a sigh of relief and dared to hope that from this quarter at least there would be for a space no further cause of industrial uncertainty and disturbance.

If this reasonable expectation was disappointed, the explanation is to be found, not in any demonstrable change in public feeling, but in the complete overturn in the general political situation. Suddenly and unexpectedly, the tariff was shoved aside as the party issue, and the currency took its place. The stormy session of 1893, in which the silver-purchase act of 1890 had been repealed, foreshadowed the coming change; the commercial crisis of 1893, and the years of depression which followed,

completed it with surprising quickness. Ever since the demoralizing days of the excessive paper issues of the civil war, periods of depression have favored the growth of the party of cheap money. The free-silver party, now the party of cheap money, found its hold strengthening in the South and West, and finally captured the Democratic organization. In the South, always the main seat of the political strength of the Democrats, the tariff question had for some time been holding its dominant place largely as a matter of tradition. The opposition to protection had been inherited from the political tenets of *ante-bellum* days, and the tariff issue was easily displaced by the new and burning question. The majority of the Democrats of the new generation were won to the free-silver side; the old leaders were contemptuously discarded; the political centre of gravity suddenly shifted. The Democrats being pledged defiantly to one side, the Republicans had no choice but to take the other. Thus the election of 1896 turned directly on the question of the free coinage of silver. The popular verdict was clear on that question, and on that only.

It was not to be expected, however, that the Republican party would desert its old faith, or turn suddenly with whole and single heart to the new issue forced upon it. For years—almost for generations—the Republicans had been fencing and compromising on the various phases which the currency question from time to time assumed. Moreover, the depression which set in after the crisis of 1893 made an opportunity for the apostles of high pro-

tection as well as for those of free silver. Both parties in the newspaper tariff controversy of 1890–94 had predicted a general rush of prosperity, the one from high duties, the other from low duties. As the years succeeding 1893 grew blacker and blacker, the stanch protectionists had the opportunity to cry: "We told you so; let us return to the policy of prosperity." In the early part of 1896, before the silver question had forced itself to the front, the Republicans had resolved to stake the issue once more on protection; and it had accordingly been settled that Mr. McKinley was to be the party candidate for the Presidency. What might have been the outcome of a campaign in which the tariff was the single issue cannot be said; though the general conditions at the moment certainly were favorable to the party not in power. Fate willed it that the campaign centred on silver. But here, after all, the Republicans were on the defensive. As to the currency, they undertook only to maintain the *status quo;* while on the tariff, though it might be in the background during the campaign, they had resolved to take the offensive, and had engaged to legislate afresh at the first opportunity.

This difference in disposition as to the two problems became more pronounced when the smoke of battle cleared away, and the next move was in order. While the popular and electoral votes had been clearly for the Republicans, the complexion of the national legislature was not so altered as to give them a free hand on the currency. In the Senate they had no controlling major-

ity without the aid of silver votes. On the currency question the party, as such, could do nothing,—certainly nothing without dissension and recrimination. But on the tariff question something could be done at once.

The occasion for action was the more urgent because of the state of the finances. For several years there had been a deficit in the current operations of the Treasury. The first fiscal year in which the balance had been on the wrong side was 1893–94; and then followed several years similarly unfortunate.[1] The very circumstance that the deficit appeared, and indeed had been most serious, while the tariff act of 1890 was still in force, indicated that it was due, not to the particular provisions of the act of 1890 or of its successor of 1894, but to the general industrial conditions of the period after 1893. The great crisis of 1893, itself the result of a complexity of causes, among which reckless monetary legislation was the chief, had been followed, as such revulsions must be, by a sharp falling-off in the imports and a consequent heavy decline in the customs revenue. The deficit which resulted was often alleged to be due to specially inadequate legislation in 1894. The

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Fiscal Year.	Ordinary Revenue.	Expenditures.	
1892–93	461.7	459.4	2.3 Surplus
1893–94	372.8	442.6	69.8 Deficit.
1894–95	390.4	433.2	42.8 "
1895–96	409.5	434.7	25.2 "
1896–97	430.4	448.4	18.0 "

The figures indicate millions of dollars. The deficit really began to appear in the second half-year of the fiscal year 1892–93; but the receipts in the first half-year had been large, so that this fiscal year as a whole showed a small surplus.

act of 1894 had indeed failed to make rigorously careful provision for the needed revenue; but the same had been the case with the act of 1890, and was again the case, as we shall presently see, with that of 1897. The looseness of our federal legislation, so far as careful calculation of income and outgo is concerned, is an old and familiar phenomenon, the result partly of general political conditions and partly of the reliance on so variable a source of revenue as protective customs duties. But in partisan discussion, much was made of the failure of the act of 1894 to yield the revenue needed at the time; and at all events some measure of relief for the Treasury was called for.

Hence President McKinley, in calling the extra session of 1897, asked Congress to deal solely with the import duties and the revenue. The two questions of industrial policy and of legislation for revenue ought, indeed, to be considered separately. But in the history of tariff legislation in the United States, as in that of most other countries, they have been constantly interwoven; and so they were in this case. What with the undeniable need of revenue, the comparative ease with which party strength could be consolidated on the question of protection, the old predilection of all the leading spirits among the Republicans for that issue, and the clearly expressed wish of the President, the tariff at the extra session received exclusive consideration. Thus the first fruits of the election of 1896 were legislation, not on the question which had been uppermost in the campaign, but

on the tariff question, on which no clear and unequivocal evidence of popular feeling had been secured.

The legislative history of the measure was instructive, and in some respects showed striking contrasts with that of its predecessor of 1894. In the House the bill was reported by the Committee on Ways and Means as early as March 18th, within three days after the session began. This extraordinary promptness was made possible by methods that paid scant respect to the letter of the law. Strictly, so long as the new Congress had not met, no one was authorized to take any steps towards legislation at its hands. But, long before this, it was settled that Mr. Reed was to be once more Speaker, and he was able to intimate that the existing Committee on Ways and Means was to remain substantially unchanged in the next Congress; and, during the hold-over session of 1896–97, that committee accordingly was at work on the tariff bill, and was able to present it to the new Congress immediately on its assembling. Mr. Dingley, already chairman of the committee in the Fifty-fourth Congress (1895–97), was again to be chairman for the next; and his name was attached in popular discussion to the new measure which he was able to present with such celerity.

The action of the House was as prompt as that of its committee. Within less than two weeks, on March 31st, the bill was passed. Only a comparatively small part of it had been considered in the House: no more than twenty-two of the one hundred and sixty-three pages were taken up for discussion. In the main, the com-

mittee scheme was adopted as it stood, being accepted once for all as the party measure and passed under the pressure of rigid party discipline. The whole procedure was doubtless not in accord with the theory of legislation after debate and discussion. But it was not without its good side also. It served to concentrate responsibility, to prevent haphazard amendment, to check in some measure the log-rolling and the give-and-take which beset all legislation involving a great variety of interests. Under the iron rule of Speaker Reed, the House gave the session to the enactment of a deliberately planned tariff bill, and to that only.

In the Senate progress was slower, and the course of events showed greater vacillation. The bill, referred at once to the Senate Committee on Finance, was reported after a month, on May 8th, with important amendments. There was an attempt to impose some purely revenue duties; and, as to the protective duties, the tendency was towards lower rates than in the House bill, though on certain articles, such as wool of low grade, hides, and others (of which more will be said presently), the drift was the other way. The Senate, however, paid much less respect than the House to the recommendations of the committee in charge. In the course of two months, from May 4th to July 7th, it went over the tariff bill item by item, amending without restraint, often in a perfunctory manner, and not infrequently with the outcome settled by the accident of attendance on the particular day; on the whole, with a tendency to retain the higher

rates of the House bill. As passed finally by the Senate on July 7th, the bill, though it contained some 872 amendments, followed the plan of the House Committee rather than that of the Senate Committee. As usual, it went to a Conference Committee. In the various compromises and adjustments in the Senate and in the Conference Committee there was little sign of the deliberate plan and method which the House had shown, and the details of the act were settled in no less haphazard fashion than has been the case with other tariff measures. As patched up by the Conference Committee, the bill was promptly passed by both branches of Congress, and became law on July 24th.

In what manner these political conditions affected the character of the act will appear from a consideration of the more important specific changes.

First and foremost was the re-imposition of the duties on wool. As the repeal of these duties had been the one important change made by the act of 1894, so their restoration was the salient feature in the act of 1897. On clothing and combing wool the precise rates which had been imposed in the tariff act of 1890 were restored. Clothing wool was subjected once more to a duty of eleven cents a pound, combing wool to one of twelve cents. On carpet wool there were new graded duties, heavier than any ever before levied. If its value was twelve cents a pound or less, the duty was four cents; if over twelve cents, the duty was seven cents.

In 1894, when the duties on wool were removed, the

general expectation alike of the advocates and opponents of protection was that this change had come to stay. The political and economic probabilities in 1894 were such as to justify the expectation. The astonishing growth of all manufactures, uninterrupted before and after that date, made it certain that the United States under any tariff conditions would be a great manufacturing country, and seemed to warrant the belief that the desire for freedom in the use of materials would become stronger, the prospect of an expanding foreign trade more tempting, the demand for protection to domestic industries less insistent. The need of foreign wool for clothing the people of the United States and the inadequacy of the domestic supply were clear then, and indeed became more clear in the intervening years. In the woollen manufacturing industry itself it was to be expected with confidence that, once the transition to free wool accomplished, the manufacturers would oppose a return to the old *régime*. And, as it proved, the manufacturers expressed themselves in terms surprisingly strong on the disadvantages, from their point of view, of a return to the wool duties.[1] If, nevertheless, the change was made, the explanation is to be found mainly in the unexpected turn of the political wheel.

[1] "Never until he had experience under free wool did the manufacturer realize the full extent of the disadvantages he suffers by reason of the wool duty, and the impossibility, by any compensating duty, of fully offsetting these disadvantages." So much was said in the statement made before the Ways and Means Committee by the secretary of the Wool-Manufacturers' Association. *Bulletin of the Wool Manufacturers*, March, 1897, p. 84.

Wool is the article as to which it can be said with greatest truth and greatest plausibility that the farmer gets his share of the largesses of protection. It is true that in 1892 the farmers of Ohio and of other central States seemed to show that they were indifferent to the attraction; for in that year a whole row of central States had voted against the party of protection, and in Ohio itself the victory of that party had been so narrow as to be equivalent to a defeat. It is true also that the main effects of the duty on wool would certainly be to stimulate the activity and increase the profits of the large wool-growers in the thinly settled trans-Missouri region, rather than to benefit substantially the farmers proper.[1] But the determination to give evidence of fostering care for the farming interest was too strong to be affected

[1] In a formal communication to the Ways and Means Committee the Wool-Manufacturers' Association used the following language: "The real explanation of these extraordinary demands lies in the fact that the wool-growers of the Middle West find themselves in need of protection against their American competitors west of the Mississippi River. It was not the imports under the McKinley law, but the cheaper-grown wools of the Far West, which made wool-growing relatively unprofitable on the high-priced lands of Ohio, Michigan, Pennsylvania. Every further expansion of the ranch industry must increase the effects of this competition. An enormous tariff on wool, such as is proposed, would overstimulate this ranch industry, by its promise of excessive profits, and would thus still farther increase the difficulties of the Middle-West farmer." *Bulletin of the Wool-Manufacturers*, June, 1897, p. 133. The wool-growers had at first asked a duty of fifteen cents a pound on clothing and combing wool, and finally had proposed, as an "ultimatum," twelve cents. The manufacturers had offered to join in recommending duties of eight and ten cents (graded by value) on clothing wool, and of nine and eleven cents on combing wool. In the act the growers got substantially their ultimatum,—eleven cents on clothing wool, twelve cents on combing wool.

by such considerations. The silver party had posed ostentatiously as the special friend of the debtor and the farmer. The Republicans, having pushed forward the tariff as their first strong card, must needs do something for the farmer; and heavy duties on wool were the natural result, consistent at once with the established party policy and with the long-continued and earnest contention of President McKinley himself.

One other part of the wool duties served to show how the general political complications affected the terms of the tariff act. The duties on carpet wool, as has already been noted, were made higher than ever before. In the House the rates of the act of 1890 had been retained; but in the Senate new and higher rates were inserted, and, though somewhat pruned down in the Conference Committee, were retained in the act. They were demanded by the Senators from some States in the far West, especially from Idaho and Montana. These Senators, though Republican, were on the silver side in the monetary controversy, and so by no means in complete accord with their associates. They needed to be placated; and they succeeded in getting higher duties on the cheap carpet wools, on the plea of encouragement for the comparatively coarse clothing wool of their ranches. It had been shown time and again, on the very principles of protection, that carpet wools were not grown in the country, and that those imported did not affect to any appreciable extent the market for domestic wool. But the Western Senators, who held the balance of power,

were able none the less to secure this concession to their demands. It deserves to be noted, on the other hand, that the Senate had been disposed to lower the duties on clothing and combing wool. The Finance Committee had proposed rates of eight and nine cents a pound, and the Senate itself had voted rates of ten and eleven cents; the reduction being due to the influence of the manufacturers, who were opposed to the high duties not only because of the price added on the raw material, but also because of the still higher duties on their own products which would be entailed.[1] But in the Conference Committee the House rates of eleven cents on clothing wool and twelve cents on combing wool were restored, and so appeared on the statute book.

The same complications that led to the high duty on carpet wool brought about a duty on hides. This rawest of raw materials had been on the free list for just a quarter of a century, since 1872, when the duty of the war days had been repealed. It would have remained free of tax if the Republicans had been able to carry out the policy favored by the great majority of their own number. But here, again, the Senators from the ranch-

[1] "It is not pleasant for the American wool manufacturer to be told that the average *ad-valorem* rate upon woollen goods, under the tariff of 1890, was 98 per cent. It does not particularly help the case from the consumer's point of view to reply that the actual protective duty accorded him under that law did not exceed 45 per cent. The public looks at the fact—98 per cent." So spoke the Secretary of the Wool-Manufacturers' Association to the House Committee. *Bulletin of the Wool Manufacturers*, March, 1897, p. 83. None the less, the manufacturers in 1897 secured, and presumably asked for, an increase of the protective (*i. e.*, *ad-valorem*) duty on woollens to 55 per cent.,—a rate higher than any imposed before.

ing States were able to dictate terms. In the House bill, hides had still remained on the free list. In the Senate a duty of 20 per cent. was tacked on. The rate was reduced to 15 per cent. in the Conference Committee, and so remained in the act.

The restored duties on wool necessarily brought in their train the old system of high compensating duties on woollens. Once more we find the bewildering combination of *ad-valorem* duties for protection and specific duties to compensate for the charges on the raw material. In the main, the result was a restoration of the rates of the act of 1890.[1] There was some upward movement almost all along the line; and the *ad-valorem* duty alone, on the classes of fabrics which are most largely imported, crept up to 55 per cent. Just thirty years before, in 1867, when the system of compound duties on woollens was first carefully worked out, it rested on the assumption that a "net" protection of 25 per cent. was to be secured. But the *ad-valorem* rate, designed to give this net protection, had advanced steadily in the acts of 1883 and 1890, and in the act of 1897 reached 55 per cent.!

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[1] The drift of the changes from the rates of 1890 is shown by the following figures as to the two classes of goods most largely imported:

DUTIES ON WOOLLEN CLOTHS.

1890.	1897.
(1) If worth 30 cents or less per pound, 33 cents per pound plus 40 per cent.	(1) If worth 40 cents or less per pound, 33 cents per pound plus 50 per cent.
(2) If worth between 30 and 40 cents per pound, 38½ cents per pound plus 40 per cent.	

The experiment of free wool and of moderated (though but slightly moderated) duties on woollens, was thus tried under the act of 1894 for three short years, and these, moreover, years of great general depression. As has been already said, even under normal business conditions the transition from the system of high duties must have been for a while disturbing and trying, and the full effects of the change, alike for consumers and producers, could not have worked themselves out for several years.[1]

(3) If worth more than 40 cents per pound, 44 cents per pound plus 50 per cent.	(2) If worth between 40 and 70 cents per pound, 44 cents per pound plus 50 per cent. (3) If worth over 70 cents per pound, 44 cents per pound plus 55 per cent.

DUTIES ON DRESS GOODS.

1890.	1897.
(1) Cotton warp, worth 15 cents a yard or less, 7 cents a yard plus 40 per cent. (2) Cotton warp worth more than 15 cents a yard, 8 cents a yard plus 50 per cent.	(1) and (2) the same; but with the proviso that the *ad-valorem* duty shall be 55 per cent. if the value is over 70 cents per pound.
(3) If the warp has any wool, 12 cents a yard plus 50 per cent.	(3) If the warp has any wool, 11 cents per yard plus 50 per cent.; but with the proviso that the *ad-valorem* duty shall be 55 per cent. if the value exceeds 70 cents per pound.

It will be observed that, under the act of 1897, on dress goods (of which some $20,000,000 worth was imported in 1896), the customs officers must ascertain, first, whether the warp consists "wholly of cotton or other vegetable material"; if so, whether the goods are worth more or less than 7 cents a yard; if not, whether they are worth more or less than 70 cents a pound. All these circumstances affect the rate of duty, and obviously increase the difficulties of administration and the opportunities for evasion.

[1] See above, pp. 294–296.

While the manufacturers had cheaper wool and unlimited choice in the use of it, they had to learn to avail themselves of this advantage. The wool-growers, especially in the central districts, had to face a fall in the price of wool, and had hardly time to make the change (more or less inevitable under any conditions) of raising sheep for mutton rather than for wool. As it happened, all this distressing transition was made the more trying because it took place in a period when all industry was depressed. Just as the general revulsion of the years 1893–97 was ascribed by the protectionists to the tariff act of 1894, so the special difficulties of the wool manufacturers and wool-growers were ascribed to that measure, and here with some show of reason. Given a reasonable time, with general economical conditions of a normal sort, and it is more than probable that the new *régime* in the wool industry would have won its way to general acceptance. But the general depression of these first years made the result of the new policy seem disastrous; the sudden political shift brought the old party again into power, though on a new issue; and so the experiment of free wool and of simple duties on woollens was tried for too short a time to enable the results to prove the wisdom of the change.

On cotton goods the general tendency was to impose duties lower than those of 1890. This was indicated by the drag-net rate, on manufactures of cotton not otherwise provided for, which had been fifty per cent. in 1890, and was 45 per cent. in 1897. There was, again, as in

1890, a rigorously elaborate system of combined specific and *ad-valorem* duties on certain sorts of goods selected for especially heavy rates, such as cotton stockings and hose, and plushes, velvets, corduroys.[1] In the main, the cotton manufacturers held aloof from the new measure. The rates of the act of 1894 had been not unsatisfactory to them; and they may have feared some such policy in regard to their material as befell the wool manufacturers. In fact, the Senate, in the course of its tortuous amendments, inserted in the bill (apparently somewhat to its own surprise) a duty on raw cotton, designed to check the importation of certain kinds of Egyptian cotton whose fibre fits it for some special uses. But here no political complication within the Republican party bolstered up the change; and this proviso, absurd enough, but no more absurd than those relating to carpet wool and to hides, disappeared in the Conference Committee.

On two large classes of textile goods new and distinctly higher duties were imposed,—on silks and linens. Of the duties on silks and their effects, something is said in another part of this volume.[2] From the time of the

[1] Compare pp. 267–269 above, where the duties on these articles under the act of 1890 are referred to. The same objectionable method of specific duties, graded by value, was applied in the act of 1897, and in general with higher rates; thus by paragraphs 315, 318, 319, 386 of the act of 1897. On cotton hose, to give a single example, the lowest classes (*i. e.*, the cheapest goods) and the rates on them were:

Class.	Duty.
In 1890—Value 60c. or less per dozen	20c. a dozen plus 20%
In 1897—Value $1 or less per dozen	50c. a dozen plus 15%

Clearly, the duty of 1897 was very much higher than that of 1890 had been.

[2] See below, pp. 376 *seq.*

civil war, silks had been subject to heavy *ad-valorem* duties—60 per cent. from 1864 to 1883, and 50 per cent. from 1883 to 1897. These duties had caused a great silk-manufacturing industry to grow up, with results that were in some respects surprising, and might perhaps be cited as showing the possibility of successful application of protection to young industries. But the measure of apparent success thus attained, and the degree of protection thus afforded, did not satisfy the manufacturers or the dominant protectionists. An increasing competition from silk goods produced in Japan was feared, the spectre of " cheap labor " being invoked once more. Moreover, the fraud and undervaluation inevitable under any high *ad-valorem* duty had long suggested the desirability of arranging some schedule of specific duties on silks. Unquestionably the administration of the *ad-valorem* duty had been unsatisfactory, and the rates of 50 and 60 per cent. had been less effective in checking imports than they would have been without the almost systematic undervaluations by consignees and agents. On the other hand, the difficulties of framing a schedule of specific duties were great, and indeed had hitherto been thought insuperable. In view of the greatly varying qualities of the goods, and the difficulty of grading them by any external marks, duties by the pound or yard would be too high on the cheaper goods, disproportionately low on the dearer. The act of 1897 boldly attempted to grapple with the difficulties of the case, and for the first time imposed specific duties on silks. The

mode of gradation was to levy the duties according to the amount of pure silk contained in the goods. The duties were fixed by the pound, being lowest on goods containing a small proportion of pure silk, and rising as that proportion became larger; with the proviso that in no case should the duty be less than 50 per cent. This plan brought about an unquestionable increase in the rates, especially on the cheaper silks. How great the increase was, could be judged only by a person minutely conversant with the trade, and might be difficult to calculate in advance even by such a person. On the other hand, it was doubtful whether the administrative difficulties encountered under the high *ad-valorem* duties of previous acts would not appear in full force under this one. The exact determination of the percentage in weight of pure silk in any given piece of so-called silk goods could hardly be an easy matter. Yet this had to be precisely ascertained for the satisfactory administration of the duties of 1897. Thus, the duty on certain kinds of silks was $1.30 per pound, if they contained 45 per cent. in weight of silk; but advanced suddenly to $2.25, if they contained more than 45 per cent. The same sort of gradation, bringing sudden great changes in duty as an obscure dividing line was crossed, ran through the whole schedule; and the temptation to false statement at the hands of the importer would seem to be as great as the difficulty of detection at the hands of the customs examiner. Both in the high range of rates and in the attempt at rigorous enforcement the new act here

went far beyond the act of 1890, making a new and important advance in the application of extreme protection.[1]

On linens another step of the same kind was taken, specific duties being substituted here also for *ad-valorem*. In 1890, the *ad-valorem* rate on linens had been raised to 50 per cent., to be reduced in 1894 to 35 per cent. In 1897, a compound system was adopted: specific duties imposed with *ad-valorem* supplements, such as had already been tried on cotton hose, velvets, and other fabrics. Linens were graded somewhat as cottons had been graded since 1861, according to the fineness of the goods as indicated by the number of threads to the square inch. If the number of threads was sixty or less per square inch, the duty was one and three fourths

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[1] The important part of the silk schedule in the act of 1897 is paragraph 387, which fixed the duties on "woven silk fabrics in the piece, not specially provided for." The same rates are applicable, under section 388, to silk handkerchiefs. The method of grading is exemplified by the following summary statement of some of the rates first enumerated.

Duties on silk piece goods:

(1) containing 20% or less in weight of silk, if in the gum	$0.50	per lb.
if dyed in the piece	.60	"
(2) containing 20 to 30% in weight of silk, if in the gum	.65	"
if dyed in the piece	.80	"
(3) containing 30 to 45% in weight of silk, if in the gum	.90	"
if dyed in the piece	1.10	"
(4) containing 30% or less in weight of silk, if dyed in the thread or yarn, black	.75	"
other color	.90	"
(5) containing 30 to 45% in weight of silk, if dyed in the thread or yarn, black	1.10	"
other color	1.30	"

So the schedule goes on, the duties advancing by stages as the per cent. in weight of silk becomes greater, as the goods are dyed in the thread or yarn,

cents a square yard; if the threads were between sixty and one hundred and twenty, the duty was two and three fourths cents; and so on,—plus 30 per cent. *ad-valorem* duty in all cases. But finer linen goods, unless otherwise specially provided for, were treated leniently. If the weight was small (less than four and one half ounces per yard), the duty was but 35 per cent. On the other hand, linen laces, or articles trimmed with lace or embroidery, were dutiable at 60 per cent.,—an advance at 10 per cent. over the rate of 1890. The new specific duties on linens were expected to induce some cotton mills to turn to cheaper grades of linens, such as towel cloth; but the general conditions of the manufacture of finer linens made it doubtful here, as in the case of finer silks and woollens, whether the imported fabrics would be supplanted.[1]

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as the goods are "weighted in dyeing so as to exceed the original weight of the raw silk," and so on. Goods of lighter weight (less than $1\frac{1}{2}$ ounces per yard) are subject to still higher duties; those of lightest weight ($\frac{1}{3}$ ounce per yard or less), to the highest duty of all, the maximum being $4.50 per pound.

It deserves to be noticed that the woollen manufacturers, confronted with the undervaluation problem under the *ad-valorem* duties on woollens, found it impossible to frame a scheme of specific duties. A special committee from their number, which attempted to devise such a scheme, found that "a wholly specific schedule is impossible, because of the thousands of variations—in weave, in texture, in materials, in finish—which distinguish woollen goods from those of all other textile manufactures." See *Bulletin of the Wool Manufacturers*, March, 1897, p. 72. In the tariff bill as passed by the House the duties on woollens (over and above the compensating duty) had been made partly *ad valorem* and partly specific with gradations by value. But this additional complication in the woollens schedule was struck out in the Senate.

[1] See what is said as to these articles below, at pp. 389 *seq.*

It was inevitable, under the political conditions of the session, that in this schedule something should again be attempted for the farmer; and, accordingly, we find a substantial duty on flax. The rate of the act of 1890 was restored,—three cents a pound on prepared flax, in place of the rate of one and one half cents imposed by the act of 1894. Here, too, no appreciable economic change was likely to result. Bagging for cotton, which had been admitted free under the act of 1894, was subjected to a duty, but a lower duty than that of 1890: the rate being $\frac{6}{10}$ cent per square yard in 1897, as compared with $1\frac{6}{10}$ cents in 1890. This compromise may also be regarded as making some concession to the planter of the South.

On chinaware the rates of 1890 were restored. The duty on the finer qualities which are chiefly imported had been lowered to 35 per cent. in 1894, and was now once more put at 60 per cent. On glassware, also, the general *ad-valorem* rate, which had been reduced to 35 per cent. in 1894, was again fixed at 45 per cent., as in 1890. Similarly the specific duties on the cheaper grades of window-glass and plate-glass, which had been lowered in 1894, were raised to the figures of 1890; though on some of the more expensive kinds of plate-glass the lower rates of 1894, being still sufficient to prevent importation, were left substantially unchanged.

The metal schedules in the act of 1897 showed in the main a striking contrast with the textile schedules. Important advances of duty were made on many textiles,

and in some cases rates went considerably higher even than those of 1890. But on most metals, and especially on iron and steel, duties were left very much as they had been in 1894. Indeed, Mr. Dingley, in introducing the bill in the House, said that, "the iron and steel schedule, except as to some advanced products, had not been changed from the present law, because this schedule seemed to be one of the two of the present law [the other being the cottons schedule] which are differentiated from most of the others, and made in the main protective." Hence we find, as in the act of 1894, iron ore subject to duty at forty cents a ton, and pig iron at four dollars a ton. On steel rails there was even a slight reduction from the rate of 1894—$6.72 per ton instead of $7.84. On coal there was a compromise rate. The duty had been seventy-five cents a ton in 1890, and forty cents in 1894; it was now fixed at sixty-seven cents.

On the other hand, as to certain manufactures of iron and steel farther advanced beyond the crude stage, there was a return to rates very similar to those of 1890. Thus, on pocket cutlery, razors, guns, we find once more the system of combined *ad-valorem* and specific duties, graded according to the value of the article. It is not easy to unravel the meaning and probable effects of the complicated duties imposed in these cases; but it is clear that they were framed with a view to imposing a very high barrier to imports, and yet were arranged on the system, vicious from the administrative point of view, of

bringing sudden changes in duty as a given point in appraised value is passed.[1]

Some other items in the metal schedule deserve notice. Copper remained on the free list, where it had been put in 1894. Already in 1890 the duty had been reduced to one and one fourths cents per pound. As the copper mines, almost alone among the great enterprises of the country, had been enjoying uninterrupted prosperity, even during the period of depression, and had been exporting their product on a great scale, no one cared a straw for the duty. For good or ill the copper duty had worked out all its effects years before. On the other hand, the duties on lead and on lead ore went up to the point at which they stood in 1890. Here we have once more the signs of concession to the silver Republicans

[1] Pocket cutlery supplies a good example of the methods applied in the acts of 1890 and 1897 to the articles here mentioned. The rates of duty were:

1890.

Class.	Duty.
(1) Value (per dozen) 50 cents or less.	12 cents (per dozen) plus 50 per cent.
(2) Value 50 cents @ $1.50.	50 cents plus 50 per cent.
(3) Value $1.50 @ $3.00.	$1.00 plus 50 per cent.
(4) Value over $3.00.	$2.00 plus 50 per cent.

1897.

Class.	Duty.
(*a*) Value (per dozen) 40 cents or less.	40 per cent.
(1) Value 40 @ 50 cents.	12 cents plus 40 per cent.
(2) Value 50 cents @ $1.25.	60 cents plus 40 per cent.
(3) Value $1.25 @ $3.00 per dozen.	$1.20 plus 40 per cent.
(4) Value over $3.00.	$2.40 plus 40 per cent.

It will be seen that on the cheapest knives there was a reduction in duty as compared with 1890; while on the higher classes, and especially on the sec-

of the far West. A considerable importation from Mexico of ores bearing both lead and silver had brought some competition with American mines yielding the same metals — competition which could not well be helped as to the silver, since that would find its way to the international market in any case, but which could be impeded so far as the domestic market for lead was concerned. Accordingly there was a substantial duty on lead, and on lead-bearing ore in proportion to the lead contained.[1]

In general, the duties in the metal schedule ceased to excite controversy, and even to arouse attention. Whether or no as a result of the application of the protective system, the iron and steel industry had in fact

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ond, there was an increase. The most effective change was that by which the line of classification by value was shifted from $1.50 to $1.25,—a shift which caused many goods to come under class 3 in 1897 which were in class 2 in 1890, and so caused a great advance in the duty chargeable. It may be noted incidentally that the figure of $1.50, to mark the dividing line between classes 1 and 2, had been retained both in the House bill and in the Senate bill: the change to $1.25 was made at the last moment in the Conference Committee. It needs only a glance at the duties under these classes in 1897 to show how great will be the temptation to manufacture knives, and to juggle with their value, in such manner as to bring them below the dividing line of $1.25. The same vicious method of grading the duties on pocket-knives had been followed in the act of 1894, though with somewhat lower rates. In 1890 and 1897 (not in 1894) the method was also applied to razors, table-knives, and guns, and in 1897 to shears and scissors. The pertinent paragraphs of the act of 1897 are numbers 153 to 158.

[1] The duties from 1890 to 1897 were:

	Lead ore, per pound of lead contained.	Lead per pound.
1890	1½ cents.	2 cents.
1894	¾ cent.	1 cent.
1897	1½ cents.	2⅛ cents.

passed the period of tutelage, and had become not only independent of aid, but a formidable competitor in the markets of the world. The extraordinary development of this industry during the period between 1870 and 1895 is one of the most remarkable chapters in the remarkable economic history of our century. The discovery of the wonderful beds of iron ore on Lake Superior; the feverish development of the coal deposits of the middle West; the amazing cheapening of transportation by water and rail; the bold prosecution of mining, transportation, manufacturing, not only on a great scale, but on a scale fairly to be called gigantic—all these revolutionized the conditions of production. They called for resource and genius in the captains of industry; enabled the bold, capable, and perhaps unscrupulous to accumulate fortunes that rouse the uneasy wonder of the world; and gave rise to new social conditions and grave social problems. Something of the same sort happened in the growth of copper mining; though here the richness of the natural resources counted far more, and the situation in general was more simple. Among the forces which were at work in these industries protective duties probably counted for much less than is often supposed. An eagle eye in divining possibilities, boldness and resource in developing them, skill and invention in designing the most effective mechanical appliances,—these forces of character and of brains, developed by the pressure of competition in a strenuous community, and applied under highly favoring natural conditions, explain the prodigious advance.

The forces which so completely changed the situation of the iron and steel industry were most actively at work through the decade from 1880 to 1890. By 1890 they had worked out their effects on such a scale as to command general attention. In that year, for the first time, the production of pig iron in the United States exceeded that of Great Britain. The enormous output, and the cheapened cost, must soon have brought a sharp fall in prices. The crisis of 1893, and the depression which followed, precipitated the fall, and soon, as is the common effect of such revulsions, intensified it. Prices of all the crude forms of iron and steel went down to the foreign level and even below it. After a long period of gradual but rapid change, the results of the new conditions in the industry now suddenly worked themselves out. Not only was the domestic market fully supplied, but the beginnings of an export movement appeared. Imports of the cruder forms of iron and steel ceased entirely; and the more highly manufactured forms which continued to be brought in were mainly "specialties," made by unusual processes or affected by exceptional conditions.

Perhaps the most striking consequence of these changed conditions was the new situation as to steel rails. With the aid of cheaper pig iron, and by means of improved methods, rails were made as cheaply as in Great Britain, if not more cheaply. The combination which had succeeded for so many years in keeping the price of rails above the normal point, was still able to

hold together for some years after 1893. But the stress of continued depression, slackened demand, and sharper rivalry, finally caused it to give way in 1897, and the price of rails dropped abruptly. The duty imposed in the act of 1897 ($6.72 per ton) was nominal; for domestic prices were as low as foreign. Doubtless, in the future, such a duty, like those of former acts, might facilitate another combination and another period of inflated prices. But for the time, steel rails were exported, not imported, and at all events the period when protection could be said in any sense to be needed had clearly passed.[1]

Another consequence of the changed conditions in the iron and steel industry was that the duty on tin plate, a bone of contention under the act of 1890, was disposed of, with little debate, by the imposition of a comparatively moderate duty. The higher duty on that article in the act of 1890 (2⅕ cents per pound) had been advocated by protectionists and attacked by their opponents with equal bitterness. Yet the reduction in 1894 (to 1⅕ cents) had aroused little comment; while in 1897, with the protectionists in full command, it was raised to no more than 1½ cents, again with little comment. In the intervening period the prices of the steel sheets from which tin plates are made (tin plates being simply sheets of steel coated with tin) had fallen in the United States in sympathy with the prices of all forms of iron and steel; and this not only absolutely, but as compared

[1] See the figures in Appendix VI.

with the prices of similar articles in Great Britain. Hence even the duty of 1894 was as effective for the purposes of promoting the manufacture of this particular article, as had been the higher duty of 1890; while that of 1897, which was a trifle higher than that of 1894, was more than sufficient to maintain the protectionist support for the industry. The episode was certainly a curious one. The much-contested duty of 1890 went into effect just at a time when the general development of the iron and steel industry was preparing the way for the immediate effectiveness of the duty in stimulating domestic production; while the rapid fall in iron and steel prices after 1890, and especially after 1893, enabled the tin plate manufacture to hold its own, after a brief space, with a much lower duty than it had so insistently demanded in 1890.

A part of the act which aroused much public attention and which had an important bearing on its financial yield was the sugar schedule—the duties on sugar, raw and refined. It will be remembered that the act of 1890 had admitted raw sugar free, while that of 1894 had imposed a duty of 40 per cent. *ad valorem.* This *ad-valorem* rate had produced a revenue much smaller than had been expected, and, indeed, smaller than might reasonably have been expected. Notwithstanding the insurrection in Cuba and the curtailment of supplies from that source, the price of raw sugar had maintained its downward tendency; and the duty of 40 per cent. had been equivalent in 1896 to less than one cent a pound. In the act of

1897 the duty was made specific, and was practically doubled. Beginning with a rate of one cent a pound on sugar tested to contain 75 per cent., it advanced by stages until on sugar testing 95 per cent. (the usual content of commercial raw sugar) it reached 1.65 cents per pound. The higher rate thus imposed was certain to yield a considerable increase of revenue. Much was said also of the protection now afforded to the beet sugar industry of the West. That industry, however, was still of small dimensions and uncertain future. The protection now extended to it, moreover, was no greater than had been given by the sugar duty, even higher than that of 1897, which had existed from the close of the civil war to 1890. No doubt the changed conditions of agriculture and of the methods of beet sugar manufacture might cause the same duty to have a greater effect at the close of the century than during the earlier period. But this effect could come but slowly, and for many years the sugar duty would not fail to yield a handsome revenue to the Treasury; while at the same time it enabled the protectionist party to pose once more as the faithful friend of the farmer.

On refined sugar, the duty was made 1.95 cents per pound, which, as compared with raw sugar testing 100 per cent., left a protection for the domestic refiner,—*i. e.*, for the Sugar "Trust,"—of one eighth of one cent a pound. Some intricate calculation would be necessary to make out whether this "differential" for the refining interest was more or less than in the act of 1894; but, having

regard to the effect of the substitution of specific for *ad-valorem* duties, the Trust was no more favored by the act of 1897 than by its predecessor, and even somewhat less favored.[1] The changes which this part of the tariff act underwent in the two Houses are not without significance. In the bill as reported to the House of Representatives by its committee, and as passed by the House, the initial rate on the crudest sugar (up to 75 degrees) was the same as that finally enacted, one cent; but the rate of progression was slower (.03 cent for each degree instead of .035), and the final duty on the important classes of raw sugar in consequence somewhat less. The so-called differential, or protection to the refiners, was one eighth of a cent per pound. In the Senate there was an attempt at serious amendment. The influence of the Sugar Trust in the Senate had long been great. How secured, whether through party contributions, entangling

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[1] The rates of 1897 were:

On raw sugar testing up to 75 degrees	1	cent per lb.
For each additional degree	$\frac{35}{1000}$	" "
Hence raw sugar testing 95 degrees pays	1.65	" "
And raw sugar testing 100 degrees pays	1.825	" "
Refined sugar pays	1.95	" "
Leaving a difference between the refined sugar rate and that on raw sugar at the 100 degree rate of	.125	" "

In regard to sugar coming from countries paying an export bounty, the act of 1897 made a change from the methods of 1890 and 1894, when a fixed additional duty of $\frac{1}{10}$ cent per pound had been imposed on bounty-fed sugar. It was now provided in general terms (in section 5 of the act of 1897) that on any article on which a foreign country paid an export bounty, an additional duty should be imposed "equal to the net amount of such bounty or grant"; the Secretary of the Treasury being required to ascertain this amount in each case.

alliance, or coarse bribery, the public could not know; but certainly great, as the course of legislation in that body demonstrated. The Senate Finance Committee reported an entirely new scheme of sugar duties, partly specific and partly *ad valorem*, complicated in its effects, and difficult to explain except as a means of making concessions under disguise to the refiners. But here, as on other points, the Senate treated its committee with scant respect, threw over the whole new scheme, and re-inserted the rates of the House bill on raw sugar, but with an increased differential, amounting to one fifth of a cent, on refined sugar. So the bill went to the Conference Committee, with the differential alone in doubt. What debates and discussions went on in that committee is not publicly known. It is one of the curious results of our legislative methods that the decisive steps are often taken in star chamber fashion. But it was credibly reported that the sugar schedule was the sticking-point,—that on this schedule, and this only, each branch was obstinate for its own figures. Finally, the Senate gave way. By slightly increasing the duty on raw sugar, and leaving that on refined at the point fixed by the Senate, the House secured virtually the retention of the *status quo* as to the differential in favor of the Sugar Trust. The result certainly was in striking contrast to that of 1894. Then, too, there was a struggle between the House and the Senate on the protection of the Trust,—not indeed on that alone, but on that conspicuously. Then the House had proposed to wipe out all duties,

and so all protection; while the Senate had proposed a substantial largess to the Trust. After a struggle much longer than that of 1897, the House had given way, and its leaders had been compelled to make a mortifying concession to an unpopular policy. The outcome in 1897 was, it is true, in substance not different. The differential was the same under the act of 1897 as it had been under that of 1894; and the increase in the duty on raw sugar once more enabled the refining monopoly, as the one large importer, to make an extra profit, temporary but handsome, by heavy imports hurried in before the new act went into force. But the moral effect was very different. The House in 1897 had adopted the plan of leaving things as they were, and had successfully resisted the effort of the refining monopoly to secure more. The result was due mainly to greater party cohesion and more rigid party discipline, enforced by the genial despotism of the autocratic Speaker of the House.

The tariff act of 1894 had repealed the provisions as to reciprocity in the act of 1890, and had rendered nugatory such parts of the treaties made under the earlier act as were inconsistent with the provisions of its successor.[1] The act of 1897 now revived the policy of reciprocity, and in some ways even endeavored to enlarge the scope of the reciprocity provisions.[2] One of its sections recited, in almost the exact phraseology of the act of 1890, that the

[1] Section 71 of the act of 1894.

[2] Sections 3 and 4 of the act of 1897.

President, if satisfied that other countries imposed duties that were "reciprocally unequal and unreasonable," might suspend the free admission of certain specified articles—tea, coffee, tonka beans, and vanilla beans—and that these articles should thereupon be subject to duty, coffee at three cents a pound, tea at ten cents, and so on. The act of 1890 had held out the threat of duties as to some other important articles—sugar and hides. But these could not now be easily used for the reciprocity clauses, being dutiable in any case. Tonka beans and vanilla beans, even though imported mainly from the tropical parts of South America, were hardly weighty substitutes.

Quite different in purpose, and designed to reach countries of the same rank in power and civilization as the United States, were some provisions which contemplated not fresh duties, but a reduction of those imposed by the new act. In the first place the President was authorized, "after securing reciprocal and reasonable concessions," to suspend certain duties, and to replace them by duties somewhat lower. The articles on which reductions could thus be made were argol (crude tartar), brandies, champagne, wines, paintings, and statuary. The country aimed at was France. The higher duties on silks in the new act would especially affect this country, and might tempt her to reprisals. Her system of maximum and minimum duties, adopted in 1892, was expressly devised as a means of securing concessions in commercial negotiations. Now the United States followed suit, and arranged her own system of duties in such

manner that concessions were provided for in advance. The whole had somewhat the effect of a comedy, each country enacting high duties which it did not really care to enforce, and offering concessions which it did not regard as real concessions.

More important in its scope, but so limited as regards time and conditions as to promise little practical result, was the next section, which contemplated commercial treaties for general reductions of duties. The President was authorized to conclude treaties providing for reductions of duty, up to 20 per cent., on any and every article. But the treaties must be made within two years after the passage of the act; the reductions could be arranged only through a period not exceeding five years; and the treaties must be ratified by the Senate, and further "approved by Congress," that is, by the House as well as by the Senate. The other reciprocity arrangements, described in the preceding paragraphs, did not need the consent even of the Senate. The arrangement for a possible general reduction of duties by 20 per cent. was not contained in the House bill, but was inserted by the Senate in the course of its amendments. Restricted as it was, the chance of its leading to any change in the rates of duty was of the slightest.

An important aspect of the new act, and one much discussed, was its fiscal yield. Designed to give protection to domestic industries, it was expected also to bring to the Treasury a much-needed increase of revenue. This combination of industrial and fiscal policy is too common

in the history of the United States, as indeed in that of other countries, to have aroused much comment. Yet it was certainly unfortunate that so little attention was given to the simple question of revenue, without regard to protection or free trade. Additional taxes on beer or on tobacco (not to mention duties on tea and coffee), even though so moderate in rate as to have been little noticed and easily born by consumers, would have yielded a large, steady, and easily collected revenue. Proposals for taxes of this sort were indeed made by the Senate Finance Committee; but most of them were struck out by the Senate itself, and hardly a trace remained in the act as passed. A slight increase in the tax on cigarettes and a modification of certain rebates in the taxes on beer alone remained as simply fiscal measures. Barring these minor changes, protective duties, and these only, were relied on to convert the deficit into a surplus.

There was much heated discussion immediately after the passage of the act as to its effect on the public finances; it being predicted with equal confidence that it would fail to secure the desired revenue, and that it would convert the deficit into a surplus. It was certainly to be expected that,—once the heavy imports rushed in just before the passage of the act were out of the way,—the increased duties on sugar, on wool and woollens, and on other articles, would swell the revenue considerably. But how much? On this subject the only thing certain was that the financial effect was entirely uncertain. All calculations as to the fiscal results of

such customs legislation as the United States undertook in 1883, in 1890, in 1894, and in 1897, rest simply on guesswork. Supposing the imports to remain the same as in some previous year, it is possible to state what a given rate of duty will yield; but no one can foretell with any approach to accuracy what the imports will be. This is more particularly the case with imports of protected articles, and so with the revenue derived from them. Such an article as sugar, indeed, once the rate of duty is fixed, yields a fairly regular amount. Barring sugar, we have in the main dutiable imports that fluctuate greatly and unexpectedly from year to year. Even with rates unchanged, it is impossible to know in advance with any degree of certainty what the revenue will be. In times of activity imports tend to rise, and the revenue swells; in times of depression they tend to fall, and the revenue shrinks. He who could foretell the oscillation of the industrial tides would have something on which to base an estimate of the direction at least, if not of the rate, in the movement of the national revenues. But even for the most experienced observer and under stable rates of duty, there must always be a large margin of uncertainty in estimates of the future tariff revenue. With rates much changed, no estimate can be more than a guess.

The discussions as to the revenue to be expected from the act of 1897 served to bring into vivid relief not only the haphazard character of our fiscal methods, but the need of reform in the general financial and monetary

system. One of the arguments urged in favor of its passage was that an increase of revenue was necessary in order to enable the Treasury to fulfil its obligations for the maintenance of gold payments; and it was even maintained that a surplus was the one thing needful to bring about a sound and stable monetary situation. No doubt, as things have stood ever since the resumption of specie payments in 1879, it is not only desirable on grounds of every-day prudence that the revenue should at least equal the expenditure, but so much is important for the monetary duties which have been imposed on the Treasury of the United States. It is equally clear, however, that a continuing surplus, and the unfailing avoidance of a deficit, are not to be expected. A large accumulated surplus tempts to reckless expenditure, as it did in 1890; while the inevitable periods of depression recurrently cut down the revenue, and make occasional years of deficit more than probable. It is unfortunate enough that the questions of protection to domestic industries and of revenue for the government should be intertwined. But certainly the monetary system should be extricated from the confusion, and put on some well-defined basis of its own. The monetary problem, brought into fresh prominence by the new turn which political history took in 1896, has no proper relation with the protection controversy, and ought to have none with the fluctuations in the fiscal needs and resources of the Treasury. Difficult enough in itself, this question should not be further complicated by being attached to the question

of protection and free trade, or the more immediate question whether the system of protection should be made heavier and more extreme, or simpler and less rigorous.

The tariff of 1897, like that of 1890, was the outcome of an aggressive spirit of protection. As in 1890, much was said of the "verdict of the people" in favor of the protective policy. Yet the election of 1896 turned on the silver question; and the Democrats in 1894 certainly had much more solid ground for maintaining that the popular verdict had been against high-handed protection than the Republicans in 1897 that it had been in favor of such a policy. Given the political complications of 1896–97, it was no doubt inevitable that a measure imposing higher duties should come. But the act of 1897 pushed protection in several directions farther than ever before, and farther than the political situation fairly justified. It disheartened many who had supported the Republicans on the money issue in 1896; and even good party members, loyal to the general policy of protection, doubted whether that policy had not now been carried too far.

The new and unexpected turn thus given the tariff history of the United States was the more regrettable because the general trend of the country's development made a liberal policy at once easier and more inviting. The closing years of the century found new economic conditions, which must become of greater and greater consequence for our customs policy as the next

century is seen to open a new era. The United States is a great manufacturing country; not only this, but one in which the bulk of the manufacturing industries is no longer seriously dependent on protection. The changes in the metal industries, to which reference was made in the preceding pages, are not only important in themselves, but are of far-reaching consequence for the general industrial future of the United States. Iron and steel, on which the material civilization of the modern world rests, are produced more abundantly than anywhere else, and at least as cheaply,—soon, if not yet, will be produced more cheaply. With the wide diffusion of a high degree of mechanical ingenuity, of enterprise, of intelligence and education, it is certain that the United States will be, and will remain, a great manufacturing country. The protective system will be of less and less consequence. The deep-working causes which underlie the international division of labor will indeed still operate, the United States will still find her advantages greater in some directions than in others, and the ingenuity of legislators will still find opportunity to direct manufacturing industry into channels which would not otherwise be sought. But the absolute effect, still more the proportional effect, of such legislation on the industrial development of the country will diminish. The division of labor within the country will become more and more important, while international trade will be confined more and more to what may be called specialties in manufactured commodities, and articles whose site of production is

determined mainly by climate. Not only sugar (for the present), tea, coffee, and the like, but wool also belong in the class last mentioned, as to which climatic causes dominate; and the duties on wool, with those on woollens in their train, are thus the most potent in bringing a substantial interference with the course of international trade. But, on the whole, protective duties, however important they may be in this detail or that, cannot seriously affect the general course of industrial growth, and will affect it less and less as time goes on. In any case, the question for the future will be, even more than it has been in the past, not whether the United States shall be a manufacturing country, but in what directions her manufactures shall grow,—whether in those where aid and protection against foreign competition are constantly sought, or in those where natural resources and mechanical skill enable foreign competition not only to be met, but to be overcome on its own ground.

SOME ASPECTS OF THE TARIFF QUESTION.

In discussing the effects of the tariff legislation of the period from 1830 to 1860,[1] I have intimated my opinion that historical and statistical study is of little aid in reaching conclusions on the fundamental questions which underlie the protective controversy. In the years which have elapsed since the Civil War, the general prosperity of the community has been affected, as it was in the period before the war, by a great number of causes, some favorable, some unfavorable. An enormous public debt was incurred in a few months, and was paid off with unprecedented rapidity; paper money was issued to excess, and specie payments resumed after a long struggle; great sums were borrowed abroad and then repaid on a large scale in the years after the crisis of 1873; railways were built on an enormous scale, and with portentous rapidity; vast new tracts of land were opened for settlement; new and rich mineral resources were discovered; the arts have advanced in all directions, many branches of industry being revolutionized; immigration has taken place on a larger scale than ever before; finally, international trade has been affected not only by our high import duties, but by the rapid advance in land

[1] See pp. 116–122.

and ocean transportation. Under all these varying forces the community has undoubtedly prospered as a whole; but how disentangle the effects of any one of them?

It may be reasoned that high duties, such as those imposed by our tariff legislation must have the effect of checking imports; and that the decline in imports must have the effect of checking exports. In this direction, then, we might look for traceable effects of this one cause. But the high duties of the period from 1865 to 1890 did not prevent international trade from growing. No doubt it did not grow as rapidly as did the population; and no doubt it did not grow as much, taking into account the rate at which population has grown, as did the international trade of England, France, and Germany, during the same period. But a country like the United States, of great and diversified territory, cannot be expected to have so extended an international trade as one like England, or even France; it has a greater range of resources, and greater possibilities for the division of labor, within its own limits. To say with any certainty what would have been the development of international trade in the absence of high duties, is impossible. In fact, here, as in almost all economic reasoning, no one can prove inductively what would have been; a quandary inevitable in a subject where all the direct knowledge attainable must come from the observation of what has taken place in fact. We are reduced to reasoning from analogy and from general principles as to what must be and must have been.

When it comes to ascertaining not only the effects of

protective duties on the growth of international trade, but on the more remote and also more important question of general prosperity, we are still more compelled to rely on general reasoning alone. We can answer in any positive fashion only a few questions of a limited sort: what the duties have been, in what manner they have gone up and down, what has been the relation of imports to domestic production, sometimes (but by no means always), what has been the effect of duties on domestic prices and the domestic producer and consumer. But whether the community as a whole is better off with them than without them, involves at once a reference to the general principles of economics. Thus, we may ascertain that the duties on pig-iron for a number of years caused the prices of all forms of iron to be higher in the United States than they would have been otherwise, and so caused the people to pay more for this indispensable instrument of civilization than they would have paid without the duties. But when it is alleged that those who make the domestic iron create a home market for other products, which would disappear if the duty on iron were taken off, we must inquire what is the nature of exchange, and what at bottom makes a "market"; whether this domestic market is really a new and additional one, or a substitute for another market abroad, which is lost when the home market is created. Or when it is said that but for the duties, the wages of the iron-makers would go down, and that this fall would tend to bring with it a general reduc-

tion in wages, we must inquire what are the conditions that determine the general rate of wages, and how far they are affected by changes in tariff rates. These inquiries inevitably lead to a discussion of fundamental principles, and to general reasoning of a more or less abstract and theoretic sort. No one can expect to have a well-grounded opinion on the protective controversy who is not trained in general economic reasoning; and any conclusions he may reach on general reasoning cannot be proved by facts and figures. If his general conclusions are once firmly fixed in his mind, he can simply illustrate them by facts derived from history and statistics.

There are, however, some aspects of the tariff question on which the inductive and historical mode of inquiry is more helpful. The protective policy of the United States has had unexpected successes and surprising failures. By successes here I mean that sometimes the duties have brought about a considerable development of the protected industry; while by failures, I would describe those cases in which there has been an absence of such development. It need not be repeated that success or failure in this sense does not necessarily imply advantage or disadvantage to the community at large: it indicates only whether the immediate object in view has been attained by the protective measures. There have been curious differences in the extent to which this primary object of protection has been attained; and the results have varied, not only in different branches of manufactures, but, what is more surprising, in different sorts of

agricultural production. The history of some cases of this kind throws light at least on some important questions bearing on the protective controversy. It helps in ascertaining what would probably have been the general character of our industries if there had been no protection; whether, for example, without high duties the United States would be an exclusively agricultural country. It serves, moreover, to illustrate, if not to prove, a familiar economic principle,—the doctrine that comparative costs determine the range of international trade. Some experiences bearing on these questions will form the subject of the present chapter.

The first case to which I will turn is that of the production of flax fibre. In general, agricultural commodities are exported from the United States on a large scale, and protective duties on them, while they have been frequently imposed, are nominal: agricultural products would not be imported in any event. But with flax we find the reverse of the usual conditions. Flax has been imported into this country for generations, and import duties have had no perceptible effect in checking importation or in stimulating the production of flax at home. During the colonial times, when the great textile inventions were yet to be perfected, and when household clothing was almost universally used, flax was raised and home-spun linen produced; and this would probably have been the case even without the bounties and premiums which were common during the colonial period.[1] But, when the great inventions had

[1] Notices of these bounties are in Bishop's "History of Manufactures,"

caused the disappearance of household industry, flax and linen practically disappeared from the industry of the United States. The manufacture of cotton and woollen goods from domestic raw material arose, but that of linens hardly exists even in our own time. Only twine, thread, and a few coarse linen fabrics are now made in the United States. Duties on flax were imposed in 1828, again in 1842, again in 1846; during the Civil War the duty was maintained, and was increased in 1870. During the war, the deficiency in the cotton supply caused a temporary stimulus to flax-raising; and the increase of duty in 1870 was probably due to the wish of the farmers to continue growing flax in face of the renewed supplies of cotton. But the production of flax fibre steadily declined nevertheless. The census figures show very clearly what is the situation. The production of flax fibre in the United States in the census years was:

In 1850	3,850 tons.
" 1860	2,350 "
" 1870	13,600 "
" 1880	800 "
" 1890	120 "

The small quantity of flax now raised is of coarse quality, quite unsuited to the making of linen cloth. Meanwhile, importation continues steadily. The imports of flax fibre were in 1886 3,700 tons, and in 1890 about 5,500

vol. I., and are also collected in Mr. E. A. Whitman's "Flax Culture in the United States," which contains an excellent brief account of the flax industry.

tons. The act of 1890 made a further attempt to check imports and stimulate home production by again increasing the duty, but the same causes which made earlier efforts of this sort futile remain in force to check this one.[1]

What, now, is the explanation of a state of things so different from that which prevails as to most agricultural products? We get hints towards a solution of the problem by examining the conditions under which flax is raised in foreign countries. In the first place, flax is eminently a product of intensive culture, grown in countries like Belgium and France, whose agriculture is typical of intensive culture.[2] A laborious and careful preparation of the ground is required. Several ploughings and harrowings are called for; for the best flax, the land is trenched by spade. The ground must be carefully

[1] In the "Bulletin of the Eleventh Census on Flax and Hemp" (No. 177, April 19, 1892), Mr. Hyde, the special agent, remarks that "but little of the so-called 'fibre' produced in the United States within recent years has been fit for spinning, or has really been entitled to the designation that for convenience has been given it in census and other statistical reports. * * * The 'fibre' reported at the various censuses up to and including 1860 was an excellent grade of scutched flax, fit for spinning, and able to hold its own against all but the finest imported varieties. The 'fibre' reported in 1870, which was raised to meet the enormous demand for bagging, was, on the other hand, only a very common quality of 'tow.' * * * The 'fibre' of the present day is likewise, with few exceptions, only a coarse bi-product, and mainly an upholstery tow."

[2] The best full account of the methods of cultivating flax and hemp is given in the report of the commission appointed by Congress during the Civil War. The report is in "Senate Executive Documents" (1864–65) No. 35. A briefer and useful account, from which we quote in the following pages, has been condensed from this source and others by Mr. Whitman in his "Flax Culture."

weeded, and "in Belgium the weeding is done by hand, when the plants are a few inches high, by women and children who crawl about on their hands and knees, with cloths to protect them from the ground, working always towards the wind, so that the plants may be at once blown back to an upright position." From twenty-five to thirty tons of manure per acre are ploughed in, and, in addition, liquid manure is applied. The harvest is as laborious as the preparation. The plants are pulled by the roots; for cutting by machine or by scythe spoils the fibre, and, moreover, the part of the plant nearest the ground, which is lost by cutting, contains the best fibre.[1]

The process of preparing flax for market, however, is by no means completed when it has been taken from the ground. It must first be rotted, then scutched, finally hackled. Rotting consists in immersing the plants in water, and thereby loosening the coarse external covering from the inner fibre which is to be converted into linen. In the United States, this has been done for both flax and hemp by "dew-rotting,"—that is, leaving the plants exposed to the dew in the fields; but this method, while simple and easy, makes poor fibre. Fibre of good quality can only be made by immersion for between five and ten days in water, which becomes foul and noisome from the decomposition of the plants. "The flax is then removed from the pools, and in this operation too much

[1] In reaping flax, "a careful hand, who carries his scythe low and cuts a level swath, may do excellent work, but many workmen will waste too much of the best portion of the stalk by leaving a high and uneven stubble."—"Report of the Commission of 1865," p. 29.

care cannot be used. Hooks or pitchforks injure the fibre, and the bundles must be handed out by a man who stands in the now disgusting pool."

These bundles, when dried, are ready for the next operation, scutching, by which the inner woody pith of the plant is removed. The ancient method of doing this was simply to beat the stalks with clubs, and the reader of Tourguéneff's novels need not be told that this method is still used in Russia. Elsewhere, machines are in use, but only to a slight extent. Machines for breaking up the pith seem easy to get, and are simple enough; in Ireland, this part of the process is carried out by putting the stalks under cart-wheels. But scutching proper, the removal of the broken pith, is generally done by hand, "by beating the fibre with a blunt knife while it is held over the edge of a sharpened board."[1] Finally, after scutching, comes hackling, which corresponds to the carding or combing of wool and cotton, and which leaves the clean flax fibre ready for spinning. This again was done universally by hand at the time when the Commission of 1865 reported; and Mr. Whitman tells us it is still done "mostly by hand

[1] "Report of 1865," p. 32. Very recently (1885), a machine for scutching has been invented in France, which is said to work well. A process for rotting with warm water has also been invented in the same country, which is said to save time, to dispose of large masses of fibre at once, and to produce good quality. "Report of Flax and Hemp Spinners' and Growers' Association for 1887," pp. 12–15, 25. Attempts to supersede the old methods have been numerous and hitherto unsuccessful, and it remains to be seen what will be the working of these new processes. If successful, they may serve, perhaps, with the aid of other inventions, to bring about changes in the character and distribution of the culture of flax and hemp.

even in large mills." The nature of the fibre apparently prevents that use of machinery for which wool and cotton are so wonderfully adapted.

Hemp and flax are much alike, and what has been said in regard to flax applies in the main to hemp. Hemp of good quality must also be heavily manured, should be pulled or cut close to the ground, water-rotted, scutched, and hackled. Bounties on hemp as well as on flax were given in colonial times, and duties have been imposed on it without interruption since the formation of the Union; yet hemp of the finer sort has never been raised, and has always been imported in considerable quantities.

It should be noted, however, that the preceding remarks apply only to the cultivation of flax and hemp for the purpose of obtaining good fibre. Flax is grown in large quantities in the United States for the seed, and hemp of coarse quality is grown in considerable quantities. Flax for seed need not be heavily manured, nor need the seed be thickly sown; weeding is unnecessary; the plants may be cut by scythe or machine; the seeds are easily and quickly separated from the fibre. Seed is produced plentifully under these conditions, and is sold to oil mills; but the flax straw becomes coarse and almost useless, and is generally burnt on the fields or sold for a trifle. Hemp cultivated in the same way, and then dew-rotted, yields a coarse fibre, suitable for bagging and other coarse fabrics; and it has been grown for such uses in considerable quantities, mainly in Kentucky. In recent years, however, jute and other tropical substitutes have dis-

placed it even for these purposes, and its cultivation seems to be unprofitable.[1]

The cases of flax and hemp are not unfamiliar, for general attention has been called to them by the present discussion of the tariff question. There is another instance, in many respects similar, to which reference is rarely, if ever, made. This is the failure of our high duties on imported sugar to stimulate the cultivation of the sugar beet and the manufacture of beet sugar. We have always had duties on sugar, and they have generally been high. Since the Civil War, they have ranged about fifty, sixty, even seventy per cent. on the value. In continental Europe, beet sugar, while originally much stimulated by protection, has been able for many years to hold its own in competition with cane sugar. In France, the import duty on cane sugar and the excise tax on beet sugar are the same. In Germany, the excise is but little less than the duty; and in both countries beet sugar sup-

[1] The census figures of the production of hemp are:

For 1850	35,000 tons.
1860	74,000 "
1870	13,000 "
1880	5,000 "
1890	11,500 "

The "Flax and Hemp Association Reports" state the production to have been.

In 1884	3,500 tons.
1885	6,000 "
1886	10,000 "

The "Census Bulletin on Flax and Hemp," quoted from a few pages back, says that "though the crop reported by the census of 1890 was more than double that reported by the census of 1880, hemp production is regarded by those engaged in it as a declining industry."

plies the bulk of the consumption.[1] The processes for making beet sugar are public property, and our climate and soil are as well suited to the cultivation of the beet as are those of Central Europe. Nevertheless, the production of beet sugar in the United States, with hardly an exception, has never got beyond the experimental stage. Most experiments have failed completely; and not even a fair beginning has been made in displacing cane sugar.

For an explanation of this phenomenon also we may turn to the conditions under which beets are raised. These conditions are in many ways similar to those under which flax and hemp are cultivated.[2] The ground must be thoroughly prepared, deeply ploughed, and frequently hoed. "The more the culture approaches that of a garden, the more the quantitative and qualitative yield will be increased." Between ten and fifteen tons of manure to the acre are applied, and are supplemented by other fertilizers. The roots are not ploughed up, but only loosened

[1] The excessive drawbacks or direct bounties which have been granted in recent years on the exportation of beet sugar from Germany, France, and other countries, have given an extraordinary stimulus to the production of beet sugar. But this episode does not affect the point considered in the text; for, before the artificial stimulus began, the beet-sugar industry had reached a position of independence.

[2] See a "Report on the Culture of the Sugar Beet" made to the Department of Agriculture in 1880, by Mr. William McMurtrie. Quotations in the text are from this report, unless credited otherwise. Much of it is reprinted in Mr. H. W. Wiley's report on "The Sugar Beet Industry," published as Bulletin No. 27 by the Department of Agriculture (1890). An excellent brief account is given by E. W. Hilgard in the *Overland Monthly*, vol. VIII., pp. 561–574. An account of the beet culture, designed to aid in its introduction in this country, is given in Mr. L. S. Ware's "The Sugar Beet" (Philadelphia, 1880).

by a plough run between the furrows. They are pulled by hand, and care must be taken to prevent any bruise or cut, which may cause them to decay when stored. The leaves are cut off in the field by a knife. Ten or twenty laborers are needed to pull and prepare for transportation in one day the roots on an acre of land. So far there is an obvious analogy to the cultivation of flax and hemp; but, with beets, we have a still further characteristic of intensive culture. The beet cake which is left over in the sugar factory after the saccharine matter has been extracted is a valuable food for cattle, who again supply manure for further cultivation. In Germany it is common to combine the processes of beet-raising, sugar-making, and cattle-feeding in one large undertaking. Where this is not done, the beet cake is often exchanged by the sugar factories, weight for weight, for beet roots. Obviously, the beet cake can have so high a value only in countries where stall-feeding is universal, or very common, and where grazing land is scarce. In a country like the United States, having a comparatively thin population, grazing land is plenty, and cattle-food correspondingly less in demand.[1]

The characteristics of the branches of agriculture which we have been considering are, obviously, intensive cultiva-

[1] In recent years, renewed endeavors to raise beets and extract sugar from them have been made. In California, a small factory was put in operation at Alvarado, some years ago, and has maintained itself with profit. A much larger factory was begun in 1888 at Watsonville, and has been in operation since that time, it is said, with success. The extraordinary combination of soil and climate in California may bring about a development which could

tion and little use of machinery. The American farmer spreads his labor and capital thin over a large surface of land; and he uses machinery and labor-saving devices vastly more than the peasant or the landed proprietor of continental Europe. It is generally implied, in discussions of our international trade, that the extent and fertility of our soil explain our great agricultural exports. This is true, as far as it goes. But it should be qualified by adding that the products for which we have the most decided advantage and which we export in largest quantity are those suited not only for extensive cultivation, but suited also for the liberal use of agricultural machinery. Wheat and corn are the readiest examples of such products, and it is mainly for growing and harvesting these that we have achieved our triumphs in agricultural machinery. Flax, hemp, and beets, on the other hand, require intensive culture, and admit of little aid from labor-saving devices. The causes, therefore, of the agricultural competition of America, which has had so great an effect on the economic history of the last twenty years, are to be found not only in physical conditions of soil and climate, but also in those moral and intellectual differences which lead the American to use better tools and more machinery than his European competitor. A keen and disinterested observer has gone so far as to refer the

not be attained in other parts of the country. Along the upper Missouri valley, especially in South Dakota and Nebraska, a vigorous effort is now being made, under the stimulus of State and city subsidies, to encourage beet-raising and sugar-making. An appreciable beginning has been made, but it remains to be seen what the final outcome will be.

severity of American competition solely to this latter class of causes.[1] The American farmer, he tells us, uses lighter and better tools; he works more intelligently and strenuously; his wagons are lighter by half, and his horses better and more easily harnessed; the mowing machine is used where the German peasant still uses the scythe or even the sickle; ploughs are better; reapers, binders, threshers, are used; time and labor are saved by riding instead of walking, by windmills and piping in place of the constant drawing and carrying of water which exhaust the German agricultural laborer. Every exertion, moreover, is more active and strenuous; the German laborer and farmer becomes another man when he has lived in the United States for a year or two.

If greater use of machinery, more intelligent use of time, and steadier exertion were of equal advantage in all branches of agriculture, they would not affect international trade; but they tell more in some branches than in others. The American farmer tends to confine his agriculture to those products for which they tell, and the country imports agricultural products for which they do not tell. The rule does not, of course, hold good in all branches of agriculture. Peculiar advantages of soil and climate suffice in some cases, of which cotton and tobacco

[1] H. Semler, "Die wahre Bedeutung und die wirklichen Ursachen de nordamerikanischen Concurrenz," Wismar, 1881. The preface, by another hand, tells us that Mr. Semler is a German of San Francisco, "who has lived for many years in various parts of North America, and has observed its conditions with the eyes of a man of wide experience." The book was written with the object of conveying a lesson to German agriculture.

are the most obvious and important, to give a superiority little affected by greater efficiency or intelligence. But the most striking features in our agricultural situation seem to be explained by this sort of reasoning; not indeed by this solely, but by this taken together with the effects of a wide extent of virgin and fertile soil.

We may now turn to another set of cases, in manufacturing industry, where a similarly uneven working of protection has shown itself. The first case of this kind is in the silk manufacture, which I will examine with some detail.

The manufacture of silk goods in the United States is in the main of recent date, having come into being since the Civil War. To this general statement, however, there are two exceptions. Sewing silk has been made, in one way or another, for over a century. For fifty years after the Revolution, its manufacture was carried on, chiefly in Connecticut, as a household industry. About 1829, machinery began to be invented, was continually improved, and made the industry a manufacture in the modern sense of the term. In 1852, a new step was taken in the production of machine-twist for the sewing-machines which were coming into general use. A very large development of this branch of the industry took place, and the Census of 1860 reported the value of sewing-silk made to be no less than $3,600,000.[1] The

[1] See the sketch in Mr. Wyckoff's "Silk Manufacture in the United States," pp. 32, 42–46. See also a curious anonymous volume, "Silk Culture in the

second branch of the silk manufacture which sprang up before the Civil War, was the making of fringes and trimmings. We have little information as to its early history, but in 1860 its products were found by the census to be worth $2,800,000. Neither the manufacture of sewing-silk nor that of trimmings received during this period any special encouragement from import duties. Sewing-silk had been admitted between 1833 and 1841 at a duty which gradually went down from forty to twenty per cent. Other silk manufactures were admitted free of duty. The tariff act of 1842 imposed higher specific duties for a few years, but the act of 1846 imposed a duty of thirty per cent. on sewing-silk and one of twenty-five per cent. on other silk manufactures. These rates were reduced to twenty-four and nineteen per cent. respectively in 1857. Notwithstanding these moderate duties,—moderate, at least, in comparison with those of later years,—there was a marked growth in the manufacture of sewing-silk and of trimmings between 1850 and 1860. Other branches of the silk manufacture, however, did not exist. Almost all silk goods were obtained by importation from abroad. The duty on them was a simple revenue duty; and no question arose as to domestic production or protective duties.

After the Civil War, the situation changed completely. During the war an increase in the silk duties was a natural

United States," New York, 1844, which gives interesting information as to the early history both of silk culture and silk manufacture. In the introduction to the volume on manufactures in the "Census of 1860" there is a good sketch of the history of the silk manufacture to that date.

resource for securing greater revenue; and in 1864 the general duty was sixty per cent. Like so many other of the duties imposed at that time, it remained substantially unchanged after the war closed. For more than a generation the protective policy has been applied vigorously and continuously to this industry. The high duty has brought into existence a considerable and varied silk manufacture. The effect in this case, unlike that of some other duties, was not intentional. The high duties on silks were imposed during the war with little thought of protection and without solicitation from domestic producers. In this respect they differ from avowedly protective duties, like those on wool and woollens. But they have been followed by more marked effects; they have created an entirely new industry. The development of the silk manufacture was comparatively slow before 1870. It proceeded more rapidly in the years of activity preceding 1873. A new stimulus seems to have been given by the Centennial Exposition of 1876. The manufacture of trimmings on a wider scale was first undertaken; then that of ribbons came; soon afterwards that of brocaded and colored silks and satins, followed by that of plain piece-goods. The manufacture of silk handkerchiefs received a remarkable impulse from the Exposition.[1] At the present time, the domestic silk products are at least equal in value to the imported.[2] Many kinds of silk goods are no longer im-

[1] See the sketch in Mr. Wyckoff's "Silk Manufacture," especially pp. 42–51.

[2] Mr. Wyckoff estimated the value of silk goods made in 1886 at about $60,000,000, probably a liberal estimate. The declared value of the im-

ported. This is the case not only with sewing-silks and trimmings, but with many articles of which the domestic production did not begin before the war, such as handkerchiefs and most kinds of ribbons. Other articles, again, are made little or not at all, especially the finest piece-goods. Between these classes comes the debatable ground, on which foreign and domestic silks compete. Here may be placed most dress silks, but the domestic producers in recent years have been steadily increasing their hold on goods of this sort, and now supply much the greater part of their consumption.

This brief sketch of the history of the silk manufacture shows how different has been its development from that of other textile industries. The manufactures of cotton and wool attained a large growth and a firm position long before the Civil War, while that of silks is, in the main, of very recent date. Silks are still imported more largely than other textile goods. The explanation of these facts must be sought in the character and processes of the industry.

The peculiarities of the silk manufacture are the result of the qualities of silk fibre.[2] Raw silk is not made in

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ports in recent years has ranged between $30,000,000 and $35,000,000. Making allowance for duties and for undervaluation of imports (said to average at least twenty-five per cent.), we may conclude that the American public pays out about as much money for domestic as for foreign silks.

[2] The description of the silk industry in the following paragraphs is derived largely from Mr. Wyckoff's instructive book on "The Silk Goods of America"; and the quoted passages are taken thence, unless credited to other sources. This volume is not to be confounded with the same writer's "Silk Manufacture," to which reference has been previously made.

the United States. Spasmodic attempts to encourage its production have been made, by bounties during the colonial period, by premiums in the early years of our national existence. At the present time there is a feeble attempt to establish it in California. The hopelessness of these attempts has permitted raw silk to remain on the free list, and the entire supply is obtained by importation. The raw silk so imported differs in marked ways from cotton and wool. In the first place, it corresponds not so much to raw cotton as to cotton carded and spun. It has been reeled from the cocoons, perhaps rereeled; and on the character of the reeling depends mainly the quality of the fibre.

"There is found on the outside of every cocoon a considerable amount of light thread, containing more or less roughness and impurity, and, in general, unfit for reeling. This ought to be stripped off entirely, and accounted as 'waste silk'; but some of it finds its way occasionally to the reel, in inferior grades of the raw material. When a filament that is fit for the reel has been reached, it is found that this filament is itself uneven in strength and thickness, the exterior layers being weaker and thinner than those nearer the insect. It is the business of the experienced reeler to put a thread of an even thickness and strength on his reel. To do this, he may have to unite four, five, or more filaments, from different cocoons, on a single thread, the number of filaments depending on their comparative thickness and the size of the thread required."

But, even after this laborious preparation,—which, it may be noted here, goes far to account for the failure to produce raw silk in this country,—the fibre is by no

means of homogeneous quality, and by no means ready for the machine.

"There are about a dozen distinct processes which raw silk must undergo to prepare it for the loom. . . . In each of these processes, except dyeing, imperfections in the thread cause loss of time and material. Suppose, for instance, that the raw silk, as imported, is uneven. That is to say, the continuous thread which is to be wound on a spool is found to be of irregular thickness as it unwinds from the reel. Such a thread is stronger in some parts and weaker in others. What happens? Probably the thread breaks in the first winding from the reel. The winding machine stops automatically, and perhaps a portion of the thread which is weaker than the rest has to be pulled off and thrown aside as waste silk. Then a knot must be tied, and the winding goes on again. But, if the raw silk is very irregular in thickness, a similar accident can happen in any of the subsequent processes; a loom may have to be suddenly stopped. It is always the same story,—breakage, stoppage, waste of time (labor), and material. The loss of time when machinery, running at high speed, has to be stopped, becomes a serious matter, from the mere fact that there is no production during the stoppage. 'It costs,' said a manufacturer, 'fully five times as much to tie a knot in this country as in France.'

"To eliminate, as far as possible, defects of this class, silk is subjected to a series of sortings between the steps of its progress from the cocoon to the loom. * * * Our manufacturers take more pains than formerly to make their own sorting of the raw material fairly accurate, previous to the first winding. Moreover, at a later stage, before they are dyed, the threads are weighed with exactness by a mechanical process called 'drumming,' and sorted again. * * *

"One of the preparatory processes that precede weaving has been mentioned as 'picking.' This consists of spreading out

every thread of the warp separately, examining it with the utmost minuteness, and removing all knots, slugs, and irregularities. A large number of slowly moving threads are spread out like a huge fan ; while keen eyes are bent upon them, and nimble fingers seize and extract the imperfections. * * * In Europe, where weaving is done mostly by hand, picking is part of the business of the weaver: he stops his loom at any moment to remove a knot or slug from the thread as it is woven. He is expected to turn out goods free from defects of this character. The system here is entirely different, and it is necessary to have all the threads of warp and woof as perfect as possible, so that there shall be no stoppage of the power-loom."

The concluding words of this passage point to the striking contrast between the methods of the silk manufacture in this country and in those parts of France and Germany which still remain its chief seats. This instructive difference cannot be better described than by quoting again from Mr. Wyckoff:

"The system of manufacture in Europe is entirely different from that which has grown up in this country. Judged from our point of view the European manufacturer seems rather to be a mere contractor. He buys tram and organzine—*i. e.*, filling and warp,—which have been made at a separate factory. He sends this material to another establishment, a dye-house. Finally, he puts it out to weavers who have looms in their own homes. He has no factory and no machinery. Under such circumstances, it is not surprising that there is little improvement in machinery and methods from year to year. Our manufacturers have been obliged, on the contrary, to concentrate the work, so as to keep every portion of it under direct supervision. In several of our large silk mills, all the different processes are conducted under a single roof. * * * There

is a marked disposition to try improvements in this country; and it is the general experience that the very best machinery, though at first far more costly, is in the end decidedly the cheapest. * * * The American system is largely a consequence of substituting machinery for hand labor."

A struggle thus seems to be going on in the silk industry between large factories and machinery, on the one hand, and household industry and manual labor, on the other. The same contest went on in the cotton and woollen manufactures at the close of the last century and the beginning of the present, but with the conditions much more favorable to the survival of the old-fashioned system. Silk fibre is much less adapted to the complicated and rapidly moving machinery of textile manufactures than are cotton and wool. It is not surprising, after reading Mr. Wyckoff's description, to learn that four fifths of the looms in the city of Lyons are still hand-looms,[1] and that Crefeld, the chief seat of the silk manufacture in Germany, is a town of household operatives. The necessities of the situation compel the silk manufacturers of this country to attempt the substitution of machinery for hand labor, and the use of more elaborate and more efficient methods. Such a change alone will enable the manufacture of an article as easily transportable as silks to hold its own side by side with the agricultural industries in which by far the greater part of our population is engaged. The endeavor shows itself not

[1] The United States consul at Lyons wrote in 1883 that, of 120,000 looms in that city, but 20,000 were power-looms.—"Reports of the Consuls of the United States," July, 1883, p. 77.

only in the concentration of the manufacture, in the invention and increasing application of labor-saving machinery, in the use of power-looms instead of hand-looms, but also in the strenuous efforts to secure raw silk of more even and uniform quality.[1] The preference of American manufacturers for the best grades of raw silk, and their willingness to pay good prices for it, are not the result, as one might infer from some allusions to it, of any special virtue on their part. Their policy is due simply to the necessities of the situation. The more uniform the material, the more can machinery be used; the greater the use of machinery, the better the chance of the American producer.

Hence we find that the various branches of the silk manufacture have been put in a firm position in proportion to the possibility of using machinery. Sewing-silk,

[1] "In Italy and in France there are two classes of silk produced: 'country silk,' which is reeled in households and by primitive methods; 'filature silk,' which has been reeled with skill and sedulous care in filatures. The 'country silk' is, of course, inferior, and very little of it is sent to this country, because it requires much labor to be expended on it in manufacturing processes. The factories in Europe, where labor is cheap, can use inferior silk to better advantage than is possible in America. The silk produced in China is, in the first instance, 'country silk'; and, to prepare it for this market, it has to be rereeled. The Japanese now have filatures, and send us silk equal to the best of European. In Asia, as in Europe, the coarser and inferior silks are kept at home; America gets the finest and best."—Wyckoff, "Silk Goods," p. 11.

On the same page, we are told that "reels for this purpose [rereeling] were in the first instance made here and sent to China; their use was brought about by the earnest and repeated representations of American merchants there." The large growth of Japanese shipments of silk to this country is said to be due to the intelligence and adaptability which the Japanese have shown in improving the reeling of silk.

the earliest branch and the most firmly established, is the product of American inventions. It is not surprising that machinery should be readily adapted to the comparatively simple processes of twisting several fibres together, and then winding and spooling them,—which are the essential processes in making sewing-silk and machine-silk. Another illustration of the same tendency, and a most instructive one, is in the successful manufacture of "spun-silk" goods. These are made from waste silk; that is, from the fibres of damaged or incomplete cocoons, from those which are thrown aside as unfit for reeling in the filatures, and from the tangled waste left in the earlier operations of the silk mill. These fibres are carded and spun by methods very similar to those used for cotton, and they produce "a material of such perfect uniformity that the thread to be made from it can be produced with absolute mathematical accuracy of any required size." The silks made from it were the original "American silks"; they are made with abundant use of machinery; they are cheap, durable, and good. But, unfortunately, they lack a certain lustre, an agreeable softness, and a peculiar rustling sound much prized by our better-halves. We are told that they are "hard." Those qualities in the fibre which make silks agreeable to their chief consumers seem to be lost in the processes of carding or rapid spinning, and spun-silk goods fail to displace the more insinuating articles which come from the reel. Yet their consumption has steadily increased. By mixture with reeled silk, and by other

improvements, their quality has been made more agreeable. They are said to be specially well adapted for silk prints, and in the production of these the characteristics of American manufactures are again illustrated. "In Europe, printing is done with little blocks, a few inches square, which are slowly and more or less imperfectly used in handwork. Here, ingenious machinery is employed, printing many colors at once. A machine for this purpose requires a special engine to drive it, in order to have it under absolutely accurate control as to speed, pressure, and registry. Patterns that cannot be perfectly matched by hand may be turned out faultlessly by such machinery."

The answers to the questions presented by our sketch of the history of the silk manufacture now suggest themselves. The nature of the silk fibre was an obstacle to that extensive use of labor-saving machinery which is characteristic of American industry. The field is not promising for the ingenuity and inventiveness which give American manufactures their distinctive advantages. The same reason, no doubt, explains why in Europe the silk manufacture has its chief seats in France and in Germany, and not in England. While England's textile manufactures have in general maintained their superiority over those of the Continent, the silk manufacture continued to call for protection long after the general policy of free trade had been entered on, and, in fact, suffered under the reduction and final repeal (1860) of duties on silks. The conditions on the Continent are more favorable to

industries in which there is comparatively little use of machinery.

It may indeed happen that Yankee ingenuity will revolutionize the conditions of this industry. The attempts of the American manufacturers to get a more even supply of raw silk, and to apply machinery to its conversion into silk goods, may prove successful, if not throughout the industry, at least in many parts of it. The progress of the silk manufacture in recent years has been extraordinary. Ten or fifteen years ago, American dress silks were hardly heard of, and such as existed were of harsh and poor quality. At present, much the larger part of the dress silks which are used are of American make, and they are inferior in quality to none but the choicest imported goods. The dress silks which continue to be imported are largely figured silks. Of such goods, no great quantity of any one piece can be made with profit; there are not likely to be many purchasers whose tastes will be hit by any particular pattern. It does not pay to make goods of this sort on the power-loom, which, like all expensive machinery, is profitable only when it works continuously and turns out large quantities at a time. The hand-loom turns out less at a time, and is more easily transferred to a new pattern. Figured silks are therefore more often made in the old way, and for that reason, again, are largely imported. Probably the same conditions hold good, in greater or less degree, of other imported silk goods. The very finest qualities of dress goods, such as require much individual attention from the workman,—laces, some sorts

of embroideries, velvets, and goods which are half silk half cotton, or wool,—make up the greater part of the importations.[1] But with dress goods, as with handkerchiefs, ribbons, upholstery silks, the American manufacturers have wellnigh driven out their foreign competitors. They would continue to hold their own, even if duties were considerably reduced.

What the position of the silk manufacture might be if duties were entirely swept away, it is impossible to say. Some branches of the manufacture would probably hold their own, while others would disappear. Should there continue in the future a progress such as has undoubtedly been made in recent years in the American silk manufacture, it may happen in the end that most sorts of silks will be made here as cheaply as abroad, and that the abolition of protective duties would affect the silk manufacture as little as it would now affect the bulk of the cotton manufacture. If this proves to be the case, we shall have an example, and a striking one, of the successful application of protection to young industries. It is unlikely that any attempts at silk-making would have been made here but for the high duties of the war, and such progress as the manufacture has made may be fairly ascribed to the stimulus of protection. It remains to be seen whether this progress will be continued so far as to attain the true end of protection to young industries,—the supply of the com-

[1] I must confess that I have found no clear explanation of the continued imports of some silk goods; *e. g.*, goods of mixed materials. Possibly it is simply a matter of habit and of inexperience among domestic producers; but I suspect there is some deeper reason.

modity at a price below that of the foreign article. The nature of the fibre makes it improbable that there will ever be any such complete application of machinery as in the manufacture of cotton and wool; but no man can say it will not be done, for the march of invention brings many surprises. The question turns, however, on this: unless there is continued application of machinery and continued invention of labor-saving processes, such as will make labor here more efficient than abroad, then, so long as our general economic conditions bear their present relations to those of Europe, we cannot expect the growth of a varied and independent silk manufacture.[1]

I suspect that conditions similar to those of the silk manufacture would be found to exist in other textile industries, whose products continued to be imported notwithstanding high duties. Linens, for example, were subject to a duty of thirty-five per cent. from 1864 to 1890;

[1] Before leaving this topic, a word may be said on another explanation of the silk situation. Mr. J. Schoenhof, in his volume on "The Industrial Situation," chapters VI. and VII., has come to the conclusion that the real cause of the continued imports of silks is to be found not in the conditions of the industry, but in the practice of adulteration by foreign manufacturers. He gives striking illustrations of the extent to which foreign silks are loaded with dye-stuffs. Sometimes four fifths of the weight of a piece of black silk is dye, and but one fifth silk fibre. No doubt silks often are greatly adulterated, and very likely the practice has been more widely resorted to because of the desperate efforts of the French and German manufacturers to keep their hold on the American market, in face of the high duty and the growing domestic manufacture. The practice is a phase, perhaps temporary, of the struggle between the old and the new methods of manufacture. But, if unadulterated American silks really satisfy the wants of consumers, and, quality for quality, are cheaper, they will hold their own in the long run, and will conquer the market, even though the change in the direction of consumption may take place slowly in the case of an article so much affected by

in the latter year, the rate was raised to fifty per cent. Some sorts of coarse linen goods, such as shoe-thread and coarse towel linens, are made in this country; but by far the greater part of our linen is obtained by importation. Flax fibre, like the ordinary reeled silk, is not adapted to the use of rapid-running machinery. Most fine goods are made on the continent of Europe, on hand-looms. Where machinery is used, it is applied to less advantage than for making cotton and woollen goods, and, moreover, is applied with unpleasant surroundings. For fine flax-spinning, the fibres must be moist; "the atmosphere of a fine flax mill is steaming hot, and the operatives in the best English mills wear waterproof capes and overalls."[1] In other words, the fibre must not only be produced, but manipulated, by methods which do not give scope to the faculties which make American producers efficient, while they entail hardships for which American laborers would have to be compensated by exceptionally high wages.

fashion and prejudice. If, on the other hand, foreign silks, adulteration and all, prove permanently more pleasing to the consumers, whose tastes must in the long run decide what is wanted, American manufacturers will hardly hesitate—and, in fact, do not hesitate—to resort to similar adulteration. It may be, indeed, that there is a greater possibility of adulterating successfully under European than under American methods. Mr. Wyckoff tells us that "all the processes from first to last by which an inferior article can be made to appear equal to that of a higher grade are costly in labor" ("Silk Goods," p. 26). This is a significant circumstance, and very likely goes far to explain the alleged greater purity of American silks. On the whole, while adulteration is one of the things that must be taken into account in explaining the present situation, the fundamental explanation seems to me to lie in those conditions of the industry which were described in the text, and of which for that matter, Mr. Schoenhof's interesting account supplies excellent illustrations.

[1] I quote from a private letter.

The manufacture of fine dress goods seems to present another case of the same sort. Fine woollen goods for women's wear have never been made in the United States, notwithstanding successive advances in the duties on them in 1867, 1883, and in 1890. The imports flow in over the barrier of the high duties in a large and steady stream. Some clew toward the explanation of this phenomenon is probably to be found in the following description, by an American manufacturer, of the mode in which fine dress goods are made:

"The finer we spin yarns, the greater becomes the cost of their manufacture, because the smaller becomes the product of a given amount of labor. Thus the proportion of labor cost in a fine yarn, as compared with the cost of the raw material in that yarn, increases very rapidly as the fineness of the yarn increases. * * * In the weaving of the superfine fabrics which are the special characteristics of French dress goods, the finest yarns are required; and the amount of labor to the material represented in a yard of these goods is therefore much greater than in a simple quantity of any other woollen fabric. . . . These goods require at every stage in their fabrication the utmost attention to details, and the most expert operatives that can be obtained. They stand by themselves."[1]

Doubtless these reasons, which were urged in favor of the high duties imposed in the tariff act of 1890, explain

[1] Mr. William Whitman, President of the Association of Wool Manufacturers, in the "Bulletin" of the Association, vol. XX., pp. 299, 301. It is fair to add that Mr. Whitman argues that "the obstacles to be overcome in the silk industry were greater than in the field that now invites our entry," and prophesies that the high duties will not enhance the cost of these goods to the consumer.

not only why these goods have not been made in the United States, but why the French have made them to the exclusion of the English.

The glass manufacture presents a set of phenomena analogous to those just discussed, and in some respects even clearer and simpler. Some sorts of glass are imported steadily in large quantities, nothwithstanding high duties; other sorts are not imported at all, though the duties on them are comparatively low. As a glance at the table will show, imports of plate-glass and window-glass continue on a large scale, notwithstanding heavy duties.[1] High protection has indeed caused a rapid growth of the domestic manufacture, especially in the case of plate-glass. On both these kinds of glass the duties are specific, and are equivalent in some cases to more than 100 per cent. on the value. Yet the imports of plate-glass seem to remain virtually stationary, while those of

[1] The figures which follow state the value (in thousands of dollars) of the domestic product of the more important sorts of glass in the United States according to the census returns for 1880 and for 1890, and the imports of the glass of similar kinds for the fiscal years 1879–80 and 1890–91. Where the duties are specific, as on plate- and window-glass, they have been stated in terms of their general *ad-valorem* equivalents. In comparing the value of the imports with that of the domestic product, it must of course be remembered that the price of the imports, as they reach the consumer, is doubled (more or less) by the duties:

		Value of Imports.	Rate of Duty.	Value of Domestic Product.
Plate-Glass,	1880	1,715	60 @ 100%	868
"	1890	1,652	"	4,870
Window-Glass,	1880	1,427	"	5,047
"	1890	3,010	"	9,059
Glassware	Plain, moulded, pressed, 1880	38	35%	
	" " " 1890	47	40 @ 60%	
	Cut, engraved, stained, 1880	722	40%	1880— 9,568
	" " " 1890	1,007	45 @ 60%	1890—18,601
	Other, 1880	951	40%	
	" 1890	1,145	45 @ 60%	

window-glass increased, between 1880 and 1890, as rapidly as did the domestic production. Similarly, glassware that is cut, engraved, stained, or ornamented, is steadily imported in large quantities, in face of heavy duties,—duties which in the acts of 1890 and 1897 were raised to 60 per cent. On the other hand, the imports of ordinary pressed glassware are practically nil, while the domestic production of articles of this sort, chiefly table-ware, is enormous. The census returns of 1880 and 1890 do not distinguish, as do the customs returns, between the different qualities of "glassware"; but the bulk of the very large quantity of glassware produced in the country was cheap pressed glass, very little being cut or ornamented glass of an expensive sort. Yet the duty on plain glassware is only thirty-five per cent., and that on other glassware only forty per cent. The situation is much the same with glass bottles, the domestic product being large, the imports small, and the duty comparatively low.

As we might expect from these facts, the methods of production are very different for the different sorts of glass. Window-glass—to begin with an important and typical article—continues now to be made in very much the same way as in past generations, nor is there any appreciable difference between the methods of manufacture in this country and in Europe. The most important operation is that of blowing the glass. The molten material is gathered on a block of wood, and then blown into a cylindrical shape having walls of the thickness desired for the glass. The cylinder is then loosened from the blow-pipe, split open, flattened, annealed, polished, and

cut into regular shapes. In all these operations "there has not been a single inch of progress since the day when cylinder-glass was first made." Moreover, "from the very nature of the business, it is absolutely impossible to use machinery in it. The inventive genius of the American people cannot be brought to bear effectively in making window-glass. The business has to be a pure manufacture,—manual labor."[1] If the processes are the same as in Europe, and the capacity and energy of the American laborers are not much greater, obviously the lower wages which the foreign manufacturer pays will enable him to offer window-glass at lower prices than his American competitor can afford. It is not surprising, therefore, that window-glass continues to be imported in face of a very high duty.

[1] I quote from the argument of Mr. E. L. Day, a glass manufacturer who appeared as the representative of the American Association of Window-Glass Manufacturers before the Committee of Ways and Means in 1884 "Congressional Documents, House Reports, 1883–84," pp. 256, 257. Remarks of the same tenor are in Mr. Charles Colné's excellent reports on glass in "Reports of the United States Commissioners to the Paris Exhibition of 1878," vol. III., p. 347. Indeed, it would seem that in one respect the methods of manufacture are more advanced in Europe than in this country. The American manufacturers themselves tell us that they generally carry on their business on a smaller scale than do their foreign competitors. See Mr. Day's statement, as cited above, p. 256. Before the Tariff Commission of 1882, the spokesman of the window-glass manufacturers said that the concerns in the United States were, on the average, only one seventh a large as in European countries, and pleaded that "the general expenses of conducting the business of such large establishments, as is well known, make an enormous difference in the cost, enough for a fair profit to the foreign manufacturer." "Tariff Commission Report of 1882," p. 2000. It may be noted, also, that the use of gas-furnaces, a great improvement in the industry, came much earlier in Europe than in this country.—Colné's "Report," p. 352; "Census Report of 1880 on Glass," p. 37.

On the other hand, the manufacture of pressed glass is distinctively an American industry. "In glass-making, as in other industries, the scarcity of skilled labor drove our people to devise means for accomplishing work without its aid. We were naturally driven to machinery. To obviate hand-blowing, a process which is very difficult to master, shaping with press and iron moulds was substituted. The beneficial results of this invention are incalculable. It placed our manufacturers in a position to make regular and cheap wares, while skilled labor became no longer necessary. The simplicity of the operation of pressing glass was such that in a very short time men could be trained to perform the work. * * * Then came improvements fast and thick in combinations of the different pieces of moulds,—improvements in presses, and tools for holding the pieces while being fire-polished."[1] The invention of the process goes back to 1827, when the first press, for moulding tumblers, was made.[2] Since that time, the manufacture of flint-glass, which is chiefly tableware made by pressing, has flourished.

Before the Civil War, no permanent success was attained along the seaboard in the manufacture of window- and bottle-glass. In Pittsburgh and other places west of the Alleghanies, window-glass works were established at an

[1] Colné's "Report," as referred to above, p. 377. See also Mr. J. D. Weeks's report on glass, in the volume on manufactures in the "Census of 1880," p. 47. Accounts of the various improvements in the pressing process are given by these writers.

[2] Report on glass, "Census of 1880," p. 58. Presses for simple articles seem to have been in use in England and Holland before this date. Jarves, "Reminiscences of Glass-making," p. 93.

early date. Fuel and materials were abundant; and the heavy cost of inland transportation, before the days of low railroad freights, prevented any effective competition from imported glass. Near the seaboard, however, no window-glass or bottle-glass was made.[1] The manufacture of pressed-glass, on the other hand, grew and prospered. From the beginning, the United States have led all countries in this branch of the industry. Many articles which elsewhere are made by blowing and subsequent shaping with simple slow-working tools, are here made, as well or better, by pressing. So far has that process been perfected that it requires a practised eye to distinguish the best pressed-glass from cut-glass. Mr. Colné, in his report on the glassware exhibited at the Paris Exhibition of 1878, repeatedly commented on the superiority of American pressed-glass.[2] It is regularly exported in considerable quantities to Canada, the West Indies, South America, and even to Europe. If our tariff system were made more liberal, the general lowering of the scale of prices which might be expected to ensue would no doubt

[1] Mr. Jarves, in his "Reminiscences," p. 65, alludes to "the repeated failure of permanently establishing window- and bottle-glass works in this vicinity" (New England).

[2] "The American pressed-glass drew from the European manufacturers exclamations of astonishment when they saw the clearness, smoothness, and brilliancy of this glass, the freedom from mould marks, and the superior execution in general. Frequent inquiries were made as to the mode of working. This was a positive proof that they consider us superior in that line. In fact, many manufacturers frankly acknowledged to me our uncontested superiority in pressed-glass. Nothing could be seen elsewhere equalling our samples."—"Report," p. 365. Compare also p. 387 of the "Report."

cause the exports of pressed-glass, as of other manufactured articles, to increase rapidly.[1]

The manufacture of plate-glass presents a curious case, typical of one phase of the operation of the heavy duties imposed during the Civil War. Before 1860, plate-glass was not made in this country at all. During the war, high duties were imposed on it, properly enough; for plate-glass is as purely an article of luxury as could be found. These duties were retained after the war closed, and, like so many others, remain now substantially as they were fixed in 1864. At first, they operated simply as revenue duties. As they were retained, however, and the price of imported glass was kept high, capital was attracted to the domestic production of plate-glass. In 1869, a factory was built in Indiana, and a few years later another was built in Missouri.[2] A few others have since been added, and at present a large amount of capital is sunk in them. The business is one which must be conducted on a large scale, and requires much fixed capital,

[1] The exports of glassware, which consist almost exclusively of pressed-glass, range between $750,000 and $850,000 a year. Mr. Colné, in his "Report," p. 255, said that, "were it not for the difficulties created by the French tariff, American pressed-glass could be exported to France with advantage."

[2] See the statements made in 1884 before the Committee of Ways and Means by Mr. E. A. Hitchcock, for the Crystal Plate-Glass Company of Missouri, and by Mr. W. C. DePauw, the owner of large works at New Albany, Indiana. "House Tariff Reports," 1883–84, pp. 279–287. Mr. Hitchcock argued with much force that, since the duties on plate-glass had remained unchanged for thirteen years preceding the date (1876) when his corporation engaged in the business, it would be a breach of faith to reduce the duties in such way as to cause the loss of their capital.

in the shape of buildings, furnaces, ovens, and machinery for handling the plates. The process consists, in essentials, of casting the glass in plates, which are then ground, smoothed, and polished. The conditions seem to be somewhat different from those of manufacturing window-glass, where hand labor plays a large part: there seems to be greater opportunity for the use of machinery. But the machinery in this country is the same as that used abroad, and the skilled laborers have been brought hither from foreign countries. The conditions of production are essentially the same as in Europe; and, so long as this is the case, the lower wages paid there enable plate-glass to be put on the market at a lower price. Imports to this country therefore continue, notwithstanding our high duties. It is not impossible that American ingenuity will find in this industry a congenial field, and that improvements in methods and machinery will eventually enable plate-glass to be made here as cheaply as abroad. But, if it be true, as the manufacturers state, that they cannot submit to any reduction of the present very high rates, no steps in this direction have yet been taken. The duty so far has operated purely and simply as a protective duty.

The manufacturers assert that the price of plate-glass has been reduced by their competition. The price of plate-glass has undoubtedly gone down very much in recent years; but, since imports have continued regularly, the price here has been presumably higher throughout than the price abroad. I say "presumably," because it

is also asserted that the foreign producers of plate-glass have combined; that prices are not governed by competition and cost of production, but are fixed under conditions of monopoly; and that lower prices are offered in the United States because of our heavy duties. No doubt it is true that, where an article is monopolized and yields unusual profits, a duty, whether it stimulates domestic production or not, may cause the foreign producer to content himself with lower prices and lower profits. Under such circumstances, it may happen that the foreign producer rather than the domestic consumer bears a part or the whole of a duty. Whether this has been the result of the duty on plate-glass is not clear. On the one hand, the foreign manufacturers are few in number, produce on a large scale, and might well combine effectually. On the other hand, there are establishments in various countries, —France, Belgium, Germany, England; and an international combination is less likely to hold together than one between persons in the same country. Statements as to combinations abroad, when made by protected competitors here, must be received with a good deal of caution.

In the manufacture of glass bottles, the general conditions are similar to those already described for window-glass. The glass is blown. Moulds are used to some extent, but little machinery.[1] No doubt the characteristic

[1] "There is no machinery used in the making of bottles, nothing but hand labor is used." Statements made in 1884 before the Committee of Ways and Means, as cited above, pp. 292, 295.

differences between European and American processes show themselves in this industry. For example, the older method, still in general use abroad, was to apply a mould only for shaping the lower part of the bottle, the neck being separately shaped with pincers and forming blocks. Recently, metallic moulds, into which the whole bottle is blown at once, have been invented, and are in general use in this country; but in Europe the old process was still common when Mr. Colné reported on the glass manufacture in 1878.[1] On the whole, however, the industry does not seem to be one adapted to American methods of production. If we find, nevertheless, that few bottles are imported and many are made within the country, the explanation probably is to be found in the heavy cost of transportation, which gives what we may call a natural protection to the manufacture of articles so cheap and bulky as glass bottles. Even in earlier years, when duties were low, bottles were regularly manufactured, especially in places distant from the seaboard. Before the days of railroads, the heavy expense of inland trans-

[1] See that gentleman's "Report," as cited above, pp. 358–366. Mr. W. E. Smith, a manufacturer of glass bottles on a large scale, remarked in his testimony before the Ways and Means Committee of 1889–90: "Their workmen [Germans] are more careful than ours. They work more slowly. They make a better article than we can make. We have as fast workmen as there are in the world, but our American hurry and aggressiveness show in their work, and we, in endeavoring to excel one another in a day's work, do not get as good a product * * * The Germans work slowly and will produce a finer average quality of bottles than we do." "Report on the Revision of the Tariff," 1890, p. 450. May it not be said that industries in which "hurry and aggressiveness" are undesirable are not adapted to American conditions?

portation gave a stimulus to the manufacture of bottles, as well as of window-glass, at places like Pittsburgh and Wheeling, which were near the sand, fuel, and other needed materials. In our own time, the expense of inland freight is still a premium to establishments in these places. The use of natural gas in recent years has given them a great advantage; and it is probable that they would now be little affected by a reduction of duties, except in their sale in the seaboard markets.

It would be possible to present many other illustrations of the principle which has been brought out in the discussion of silks and glassware. Earthenware continues to be imported into the United States, nothwithstanding a very heavy duty. Under the low duties that prevailed before the Civil War (the duty was thirty per cent. under the Act of 1846), only the cheapest and heaviest sorts of earthenware were made, such as stone jugs, drain-pipes, brown and yellow ware. The heavy cost of transporting these articles, no doubt, explains why they too were not imported. Table-ware was supplied exclusively by importation. During the Civil War duties were raised to forty-five per cent. on plain ware and fifty per cent. on decorated; and, in the act of 1883, these rates were again increased to fifty-five and sixty per cent., respectively. Under these duties, a considerable manufacture of pottery and earthenware has developed; and, at the present time, common white ware is no longer imported. But there is still a large importation of colored and decorated ware and of all sorts of finer porcelain and

china. The domestic producers of table-ware supply no more than half of our consumption of china and earthenware, and most of them would probably have to go to the wall if the duties were removed.[1] The explanation of this state of things, strikingly in contrast with the early and assured growth of the manufacture of pressed glass, is that the potter's art has had little share in the improvements which have revolutionized so many branches of industry within the last hundred years. The potter's wheel is still the basis of the industry. The cheapening of transportation has caused the manufacture to be concentrated in larger establishments, and perhaps in fewer places, than could be found fifty or a hundred years ago; but there has been little introduction of machinery and no essential change in processes. The very mixing of the materials, which might be expected to give a good field for using power and machinery, is still done mainly by hand, attempts to use machinery having failed to yield the exact qualities wanted. Earthenware of a cheap and bulky sort is more likely to be made in large quantities of a single pattern, and affords more opportunities for using moulds, some little machinery, and labor-saving devices; it is, besides, more expensive to transport; the

[1] The reader will find the materials on which this sketch is based in the report on pottery in the "Reports of the United States Commissioners to the Paris Exposition of 1878," vol. III. pp. 190–195; an account of the pottery manufacture in *Bradstreet's*, March 6, 1886; statements of manufacturers in "Tariff Commission Report of 1882," pp. 613, 743, 1949; and in the statements made in 1884 before the Ways and Means Committee, "House Reports," 1883–84, pp. 241, 244.

cheaper qualities of table-ware are consequently produced in the United States under the present high duties. The finer goods, however, where each individual piece needs more attention and requires more labor, are made in England, France, Bohemia, and are imported in face of the duties. They will doubtless continue to be imported unless our industrial conditions change greatly, or the future brings forth a series of inventions that will make the industry suited to our present conditions.

The manufacture of cutlery supplies another illustration of the uneven development of industries apparently similar. The duty on cutlery for many years was fifty per cent.; yet there is a large and regular importation of pocket-knives. On the other hand, table cutlery, subject to the same duty, is practically not imported at all. There is a slight importation of table-knives made by certain English firms, whose products some well-to-do people, from habit or prejudice, persist in preferring; but the bulk of the table-knives used are of American make, and are as cheap as goods of the same quality are abroad. The industry being concentrated in a few large establishments, there is a strong temptation to combinations; and every few years there is a combination of the American manufacturers, which advances prices, keeps them high for a while, and then goes to pieces. But the knives are made as cheaply as they are in England or other countries, and are usually sold at prices as low. Pocket-knives and razors, however, although made to a considerable extent, cannot be made so cheaply as in England and Germany.

and continue to be imported in the face of the duty. The explanation is again that machinery can be applied to the one much more than to the other. Table-knives are made in large quantities of a single pattern; they have comparatively few pieces; the blades need no very careful grinding,—and grinding is still done largely by hand. A pocket-knife is a more complex thing; the pieces need to be put together by hand, they must be made to fit neatly, the blades must be carefully ground. If the various parts of a pocket-knife could be struck off by machinery, in hundreds or thousands, perfect, and complete, and then easily put together, pocket-knives would doubtless be made in this country with complete success. Watches can be made after that fashion, and afford a striking example of American enterprise, ingenuity, and success. But pocket-knives need to be of numberless patterns. The jobbers and retailers, who presumably know the likings of consumers, want few knives of any one style, and want new patterns every season. Obviously, production on a small scale and with little machinery, in the German fashion, accommodates itself to such a capricious demand much more readily than the American plan of using large plant, expensive machinery, and an inflexible process. That the American manufacturers have not succeeded in getting command of the domestic market is indicated by the fact that in 1890 and 1897 they asked, and in the tariff acts of those years obtained, a marked increase in the duties.

Most smaller articles of hardware, however, seem to

afford favorable opportunities for the inventive talents of American workmen and business men. All sorts of complicated articles—door-knobs, locks, hinges, house hard-ware and household utensils, spades, axes, agricultural implements, tools of all sorts—are not only made cheaply and successfully at home, but, in spite of the higher price of the materials of which they are made, are regularly exported in large quantities. Where a massive kind of production is called for, a huge plant, a steady routine, a rigid economy of materials, the organization rather than the saving of labor, the English in general excel. This was probably one cause of the commanding position they held so long as the great producers of the crude forms of iron; though much was also due to the great advantage of having rich supplies of coal very near the iron ore. In manufactures of a more delicate and refined character, if I may use such adjectives in this connection, the Americans excel. Where the nature of the material or of the product gives opportunity for the deft use of labor-saving devices, the ingenious adaptation of a tool to just the use desired, the constant application of new inventions, American manufacturers are likely to hold their own, tariff or no tariff.

In the course of the reaction which has taken place in political economy in recent years, the disposition to question the merits of the classic school has extended, first and last, to nearly all of its doctrines. Doubts have been expressed, not only on the theory of distribution, where there was perhaps most occasion for restatement and re-

vision, but also on the principles of international trade, which, on the whole, needed less remodelling than any other part of the classic structure. Dr. Ingram—to take an English representative of the reaction—admits Ricardo's theory of comparative costs to be "just and interesting"; but, when Cairnes describes it as "sounding the depths" of international trade, Dr. Ingram finds the phrase magniloquent.[1] Professor Held,[2] eminent and lamented among the Germans of the new school, considered the theory a curiosity in economic literature, and handled it with very scant respect; though it is but fair to add that, as is often the case with the protesting economists, his own discussion showed, in its details, less real divergence from the classic doctrine than his depreciation of it would lead us to expect. To the present writer, it seems clear that the phases of our economic history which have been examined in the preceding pages, can be explained at bottom only on the theory of comparative costs, which, as he ventures to assert even at the risk of being thought magniloquent, sounds the depths of the international trade of the United States. The reason why the American farmer does not produce flax fibre is not to be found in any obstacles from climate or physical conditions. His labor would yield as much flax, absolutely, as that of the European cultivator. He simply finds that his labor yields

[1] Ingram's "History of Political Economy," p. 134.

[2] In the "*Jahrbuch für Gesetzgebung*, III., pp., 179–182. The essay on "Protection and Free Trade," in which the reader will find the passage here referred to, is in general conservative.

more in other branches of agriculture. His case is the same with beet culture. Silks, earthenware, window-glass, continue to be imported, not because of any inferior productiveness of American labor in making them; it is because of a lack of that superiority which existed in other directions.

Both in manufactures and agriculture account must be taken of moral and intellectual as well as of physical causes of a comparative advantage. The classic economists did not often trouble themselves to analyze the causes of the differing effectiveness of labor in different countries, and perhaps reasoned too much as if these causes were all of a physical and unalterable sort. The late Professor Cairnes discussed the relative importance of personal aptitudes on the one hand, physical and geographical differences on the other, in determining the international division of labor, and concluded that personal aptitudes counted for little, except in the commerce of nations occupying different grades in civilization.[1] The facts presented in this chapter point to a different conclusion—personal aptitudes count for much in the trade of the United States with European countries. Adam Smith[2] shrewdly perceived that the causes of the advantages one country has over another are not all of the same kind; but he pointed out with truth that, given the ad-

[1] "Leading Principles of Political Economy," book III., ch. i., sec. 1.

[2] "Whether the advantages one country has over another be natural or acquired, is in this respect of no consequence. As long as the one country has those advantages, and the other wants them, it will always be more advantageous for the latter to buy of the former than to make. It is an

vantages, they determine the course of trade. The nature and the cause of an advantage become material only when we begin to inquire whether it is likely to persist indefinitely, and whether it can be affected by legislation. Obviously, a comparative advantage, which rests not only on physical causes, but on differences in skill, knowledge of the arts, mechanical training, qualities of character and intelligence, may be influenced, within limits, by a stimulus in the way of premium or protection. The argument for protection to young industries applies only under conditions of this latter sort. Given those conditions, it may apply more widely than English economists have been disposed to grant. Protection to young industries, which Mill believed to be of positive advantage only in a young country in the earlier stages of growth, may have had occasional and unexpected successes even within the last thirty years. The history of the silk manufacture illustrates the possible turn of events; and the application of protection in the United States has been so sweeping since the Civil War that this case, while by no means typical of the usual effects, probably does not stand alone. But such exceptions serve here, as they do in all scientific investigations, to bring out the foundation of a general rule rather than to modify it. In the present case, they suggest a more careful analysis of the causes of com-

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acquired advantage only which one artificer has over his neighbor who exercises another trade; and yet they both find it more advantageous to buy of one another, than to make what does not belong to their particular trades."—"Wealth of Nations," book IV., chap. ii.

parative advantages in different countries, but do not affect the doctrine that these comparative advantages determine the sort of trade and division of labor that will take place between them. Such phenomena as have been described in the preceding pages still reduce themselves, in the last analysis, to illustrations of the doctrine of comparative costs.

APPENDIX.

TABLE I.

Imports, Duties, and Ratio of Duties to Imports, 1860–1895.

(*From the* "Statistical Abstract.")

(00,000 omitted.)

Fiscal Year Ending June 30.	Imports. Free.	Imports. Dutiable.	Imports. Total.	Duties Collected.	Per cent. of Duties to Dutiable Imports.	Per cent. of Duties to Total Imports.
1860	68.4	267.9	336.3	52.7	19.67	15.67
1	67.4	207.2	274.6	39.0	18.84	14.21
2	49.8	128.5	178.3	46.5	36.19	26.09
3	30.0	195.3	225.4	63.7	32.62	28.28
4	38.2	262.9	301.1	96.5	36.69	32.03
5	40.1	169.6	209.6	80.6	47.56	38.46
6	57.1	366.3	423.5	177.0	48.93	41.81
7	17.0	361.1	378.2	168.5	46.67	44.56
8	15.1	329.7	344.8	160.5	48.63	46.49
9	21.7	372.7	394.4	176.5	47.22	44.65
1870	20.2	406.1	426.3	191.5	47.08	42.23
1	40.6	459.6	500.2	202.4	43.95	38.94
2	47.7	512.7	560.4	212.6	41.35	37.00
3	178.4	484.7	663.1	184.9	38.07	26.95
4	151.7	415.7	567.4	160.5	38.53	26.88
5	146.5	379.8	526.3	154.5	40.62	28.20
6	140.6	324.0	464.6	145.2	44.74	30.19
7	140.8	299.0	439.8	128.4	42.89	26.68
8	141.3	297.1	438.4	127.2	42.75	27.13
9	142.5	296.7	439.3	133.4	44.87	28.97
1880	208.0	419.5	627.5	182.7	43.48	29.07
1	202.5	448.1	650.6	193.8	43.20	29.75
2	210.7	505.5	716.2	216.1	42.66	30.11
3	206.9	493.9	700.8	210.6	42.45	29.92
4	211.3	456.3	667.6	190.3	41.61	28.44
5	192.9	386.7	579.6	178.1	45.86	30.59
6	211.5	413.8	625.3	189.4	45.55	30.13
7	233.1	450.3	683.4	214.2	47.10	31.02
8	244.1	468.1	712.2	216.0	45.63	29.99
9	256.6	484.8	741.4	220.6	45.13	29.50
1890	266.1	507.6	773.7	226.5	44.41	29.12
1	388.1	466.4	854.5	216.9	46.28	25.25
2	458.1	355.5	813.6	174.1	48.71	21.26
3	444.2	400.3	844.4	199.1	49.58	23.49
4	379.0	257.6	636.6	129.6	50.06	20.25
5	376.9	354.3	731.2	149.4	41.75	20.23
6	368.9	390.8	759.7	157.0	40.18	20.67
7	381.9	407.3	789.2	172.7	42.41	21.89

This table is taken from the "Statistical Abstract of the United States." The figures given in different editions of the "Statistical Abstract" have not always been consistent. Those given in the table are derived from the edition of 1891 for the earlier years (1860–68), and from the edition of 1895 for later years. They indicate "net imports," *i. e.*, imports less re-exports, for 1860–66; from 1867 on, they indicate "imports for consumption." Substantially, these two forms of statement come to nearly the same thing. The significant changes will be easily noted. The sharp rise in the average rate (per cent. of duties to imports) between 1861 and 1865 shows the extent to which the legislation of the war affected the general character of the tariff system. The average rate on dutiable articles, after reaching its war maximum in 1866, declines somewhat for a few years thereafter. From 1872 to 1875, there is a further fall, in consequence of the ten per cent. reduction of 1872; after 1875 the rate goes up again, and then remains fairly steady until 1883. The act of 1883 brings a distinct rise in the average rate on dutiable articles; the act of 1890 a still further rise, bringing in 1894 the maximum for the whole period (50.06 per cent.). The abrupt increase in the free imports in 1873 is the result of the abolition of the tea and coffee duties in 1872, which causes also the fall in the average per cent. of the duties collected as compared with the total imports. The abolition of the sugar duty in 1890 brings a similar abrupt increase of the free imports in 1891 and 1892, and a similar fall in the ratio of duties collected to total imports.

TABLE II.

Duties on Some Important Articles, Raised during the War, and Retained without Reduction till 1883.

Articles.	Duty under the Morrill Tariff of 1861.	Duty of 1864, in Force in 1883.
Books	15 %	25 %
Chinaware, plain . .	30 %	45 %
Cotton goods, not otherwise provided for .	30 %	35 %
Cottons, coarse, unbleached	1 ct. per yard.	5 cts. per yard.
Cotton spool-thread .	30 %	6 cts. per dozen, plus 30 % (= 60 to 70 %).
Cottons, fine printed .	4½ cts. per square yard plus 10 %	5½ cts. per square yard plus 20 %
Manufactures of flax, jute, or hemp, not otherwise provided for	30 %	40 %
Glass, common window	1 to 1½ cts. per square foot.	¾ to 4 cts. per square foot.
Gloves, of kid or leather	30 %	50 %
Bar-iron [1].	¾ ct. per ton	1 to 1½ cts. per lb.
Iron rails	$12 per ton	$14 per ton
Steel, in ingots, bars, etc.	1½ to 2 cts. per lb.	2¼ to 3½ cts. per lb.
Pig lead	1 ct. per lb.	2 cts. per lb.
Paper	30 %	35 %
Silks	30 %	60 %

[1] On all forms of bar-iron, band-, hoop-, and boiler-iron, on chains, anchors, nails and spikes, pipes, etc., etc., the duties of 1864 were in force till 1883.

TABLE III.

Duties on Certain Articles, Raised since 1864 *above the War Rates.*

Articles.	Duty of 1861.	Duty of 1864.	Duty as fixed in 1865-70.
Bichromate of potash	3c. lb.	3c. lb.	4c. lb. (1875)
Copper, ingot . . .	2c. lb.	2½c. lb.	5c. lb.
Flax	$15 ton	$15 ton	$20 to $40 ton
Marble in slabs . . .	30 %	50c. cub. foot + 20 %	$1.25 to $1.50 cub. foot + 30 %
Nickel	Free	15 %	20c. to 30c. lb.
Steel rails	30 %	45 %	$28 ton
Umbrellas	30 %	35 %	50 to 60 %
Wool	3c. lb.	6c. lb.	10c. lb. + 11 %
Woollens :			
Carpets (Brussels)	40c. sq. yd.	70c. sq. yd.	44 to 70c. sq. yd. + 35 %
Cloths	12c. lb. + 25 %	24c. lb. + 40 %	50c. lb. + 35 %
Dress-goods . . .	12c. lb. + 25 %	24c. lb. + 40 %	6c. sq. yd. + 35 % / 8c. sq. yd. + 40 %
Flannels	30 %	24c. lb. + 35 %	20c. to 50c. lb. + 35 %

TABLE IV.

Revenue from Customs Duties and Internal Revenue, 1861–1891.

(00,000 omitted.)

Year.	Internal Revenue.	Customs Revenue.
1861	None.	39.6
2	"	49.1
3	37.6	69.1
4	109.7	102.3
5	209.5	84.9
6	309.2	179.0
7	266.0	176.4
8	191.1	164.5
9	158.4	180.0
1870	184.9	194.5
1	143.1	206.3
2	130.6	216.4
3	113.7	188.1
4	102.4	163.1
5	110.0	157.2
6	116.7	148.1
7	118.6	131.0
8	110.6	130.2
9	113.6	137.2
1880	124.0	186.5
1	135.3	198.2
2	146.5	220.4
3	144.7	214.7
4	121.6	195.1
5	112.5	181.5
6	116.8	192.9
7	118.8	217.3
8	124.3	219.1
9	130.9	223.8
1890	142.6	229.7
1	145.7	219.5
2	154.0	177.5
3	116.0	203 4
4	147.1	131.8
5	143.4	152.2
6	146.8	160.0
7	146.7	176.6

TABLE V.

Production, Imports, and Exports of Copper, and Foreign and Domestic Prices.

(Quantities in gross tons.)

Year.	Domestic Product'n.	Imports.		Exports.	Price per lb. in cents.		Difference in Price.
		Copper in Pigs.	Copper Ore.		New York Lake Cop'r.	London Chili Bars.	
1875	18,000	415	2,300	2,280	23	18	5
6	19,000	777	910	6,430	21.5	16.5	5
7	21,000	750	15	6,050	19	14.6	4.4
8	21,500	165	399	5,040	16.5	13.5	3
9	23,000	70	100	7,680	17.5	12.2	5.3
1880	27,000	2,350	2,000	1,880	20	13.5	6.5
1	32,000	320	4,420	2,160	18,5	13.3	5.2
2	41,000	334	8,190	1,490	18.7	14.4	4.3
3	52,000	148	500[1]	3,890	16.1	13.7	2.4
4	63,500	65	980	7,610	13.7	11.8	1.9
5	74,000	35	1,630	19,900	11	9.5	1 5
6	70,000	18	1,840	10,850	11	8.8	2.2

Figures are from "Mineral Resources of the United States," pp. 214, *et seq.* The production is for the calendar year, the imports and exports for the fiscal year (ending June 30th). The annual average prices are from the monthly prices given in "Mineral Resources." The figures given in "Mineral Resources" seem to contain considerable understatements, so far as exports are concerned. See *Eng. and Min. Journal*, Jan. 26, 1884, p. 59.

These tables show the price in New York to have been higher than that in London by from $1\frac{1}{2}$ to $5\frac{1}{2}$ cents. In recent years the great increase in domestic production

[1] Beginning with 1883, this column states the quantity of copper contained in imported ore, not the gross amount of ore. The 8,190 tons of ore imported in 1882 contained about 600 tons of copper.

has forced down the price here, and the difference in price is not more than 1½ cents. The better quality of domestic Lake copper would cause it to bring 1½ cents more than Chili bars under any circumstances. Cost of transportation (from London to New York) is insignificant. It is safe to say that any difference in price over and above 1½ cents per pound could not exist if it were not for the duty on copper.

TABLE VI.

Production, Imports, and Foreign and Domestic Prices of Bessemer Steel Rails.

Year.	Product in U. S., Gross Tons.	Imports, Gross Tons.	Average Price in U. S.	Average Price in England.	Average Excess of American Price.	Duty.
1871	34,100	505,500	$91.70	$57.70	$34.00	$28.00
2	84,000	474,000	99.70	67.30	32.40	$25.20
3	115,200	231,000	95.90	74.40	21.50	Aug., '72, to
4	129,400	96,700	84.70	57.50	27.20	March, '75.
5	259,700	17,400	59.70	44.10	15.60	
6	368,300	.....	53.10	37.70	15.40	
7	385,900	.....	43.50	31.90	11.60	
8	499,800	.....	41.70	27.20	14.50	$28.00,
9	618,800	39,400	48.20	24.70	23.50	Mar., '75, to
1880	864,300	259,500	67.50	36.00	31.50	July, '83.
1	1,210,300	344,900	61.10	31.20	29.90	
2	1,304,400	200,000	48.50	30.00	18.50	
3	1,156,900	34,800	37.75	25.40	12.35	
4	999,400	2,800	30.75	22.90	7.85	
5	963,700	2,200	28.50	23.65	4.85	$17.00,
6	1,579,400	41,600	34.50	20.65	13.85	July, '83, to
7	2,119,000	137,800	37.10	20.65	16 45	Oct., '90.
8	1,391,000	63,000	29.80	19.20	10.60	
9	1,531,000	6,200	29.25	24.15	5.10	
1890	1,871,400	.....	31.75	27.30	4.45	$13.44,
1	1,298,900	.....	30.00	22.00	8.00	Oct., '90, to
2	1,541,400	.....	30.00	20.00	10.00	Aug., '94.
3	1,130,400	2,900	28.00	18.50	9.50	
4	1,017,100	.....	24.00	17.50	6.50	$7.84,
5	1,300,300	1,400	24.00	20.00	4.00	Aug., '94, to
6	1,117,600	7,800	28.00	21.00	7.00	July, '97.
7	1,630,000	.....	19.60	21.00	—1.40	$6.72, from July, '97.

The figures for production and importation are from the Reports of the American Iron and Steel Association. The American prices are from the same source, but have been reduced to a gold basis for the years 1871–78. The English prices have been secured partly from occasional tables given in the Iron and Steel Association reports, partly from English sources. The American prices are those for rails at the mills, in Pennsylvania; the English are for rails free on board. Prices by yearly averages can indicate only the general fluctuations; but they suffice for purposes of comparison. Where the imports are less than 1000 tons in any one year, they have been omitted. Since 1888 the imports have been sporadic, and signify little.

Cost of transportation from England to the United States has been usually somewhere between two and four dollars a ton. But sometimes it has been considerably less than two dollars; and carriage by water from England to places on the seashore in the United States has not infrequently been cheaper than carriage by land from the American rail-mills to such places.

It will be observed that there were three periods of active railway building and of heavy imports of rails: 1871–74, 1879–82, 1886–88. During these years or parts of them, prices of rails in the United States were higher than those in England by the full amount of the duty for the time being. In most other years they were higher, but by an amount less than the duty, and imports ceased, except for sporadic shipments of special sizes or kinds.

In the later years, the American prices came nearer and nearer the English prices. In 1897, prices fell abruptly in the first two months of the year, in consequence of a "steel-rail war," marking the breaking up of the combination which had so long kept prices up. For that year, prices were lower in the United States than in England. Considerable quantities of steel rails were exported from the United States, both in 1896 (72,000 tons) and in 1897 (143,000 tons).

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